

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: September 30, 2004, 11:07:46 ; Search time 1385 Seconds

(without alignments)
11369.007 Million cell updates/sec

Title: US-09-900-751-1

Perfect score: 3106
Sequence: 1 catggtacgagcgtgccccg.....ttaaaaaaaaaaaaaaaaaa 3106

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 3340653 seqs, 2534783454 residues

Total number of hits satisfying chosen parameters: 6681306

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
19: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3106	100.0	9	US-09-900-751-1	Sequence 1, Appli
2	1889.8	60.8	13	US-10-342-887-157	Sequence 157, App
3	1889.8	60.8	13	US-10-172-118-157	Sequence 157, App
4	1889.8	60.8	13	US-10-295-027-968	Sequence 968, App
5	1883.2	60.6	13	US-09-776-191-1	Sequence 1, Appli
6	1883.2	60.6	13	US-09-776-191-1	Sequence 49, Appli
7	1883.2	60.6	13	US-10-099-700A-1	Sequence 1, Appli
8	1883.2	60.6	13	US-10-099-700A-1	Sequence 1, Appli
9	1883.2	60.6	13	US-10-190-030B-1	Sequence 1, Appli
10	1883.2	60.6	13	US-10-190-030B-1	Sequence 1, Appli
11	1883.2	60.6	13	US-10-302-840A-3	Sequence 1, Appli
12	1883.2	60.6	13	US-10-302-840A-3	Sequence 1, Appli
13	1883.2	60.6	13	US-10-267-219-1	Sequence 1, Appli
14	1883.2	60.6	13	US-10-267-219-1	Sequence 3, Appli

15	1883.2	60.6	3147	15	US-10-112-221A-1	Sequence 1, Appli
16	1883.2	60.6	3147	15	US-10-112-221A-3	Sequence 3, Appli
17	1883.2	60.6	3147	15	US-10-104-271-1	Sequence 1, Appli
18	1883.2	60.6	3147	15	US-10-104-271-3	Sequence 3, Appli
19	1883.2	60.6	3147	16	US-10-147-211A-1	Sequence 1, Appli
20	1883.2	60.6	3147	16	US-10-147-211A-3	Sequence 3, Appli
21	1883.2	60.6	3147	16	US-10-156-214A-1	Sequence 1, Appli
22	1883.2	60.6	3147	17	US-10-600-187-1	Sequence 1, Appli
23	1883.2	60.6	3147	17	US-10-600-187-18	Sequence 18, Appli
24	1883.2	60.6	3147	17	US-10-729-807-19	Sequence 19, Appli
25	1793.8	57.8	3115	13	US-10-296-115-404	Sequence 404, App
26	1793.8	57.8	3115	13	US-10-296-115-404	Sequence 404, App
27	1559.2	50.2	2756	9	US-09-925-301-351	Sequence 351, App
28	1532.4	49.3	3112	15	US-10-097-340-311	Sequence 311, App
29	1530.8	48.9	2900	17	US-10-600-187-9	Sequence 9, Appli
30	1518.2	48.9	2838	13	US-10-072-012-43	Sequence 43, Appli
31	943.8	30.4	2152	17	US-10-641-643-157	Sequence 157, App
32	556.4	17.9	726	15	US-10-092-004A-1	Sequence 1, Appli
33	328	10.6	472	10	US-09-918-995-35415	Sequence 35415, A
34	306.8	9.9	434	9	US-09-736-457-1480	Sequence 1480, Ap
35	306.8	9.9	434	9	US-09-902-941-1480	Sequence 1480, Ap
36	306.8	9.9	434	9	US-09-849-626-1480	Sequence 1480, Ap
37	306.8	9.9	434	13	US-10-283-017-1480	Sequence 1480, Ap
38	306.8	9.9	434	15	US-10-017-754-1480	Sequence 1480, Ap
39	306.8	9.9	434	15	US-10-113-872-1480	Sequence 1480, Ap
40	302.6	9.7	429	9	US-09-867-701-5310	Sequence 5310, Ap
41	265	8.5	591	9	US-09-815-343-1503	Sequence 1503, Ap
42	265	8.5	591	13	US-10-097-105-1503	Sequence 1503, Ap
43	246.8	7.9	333	9	US-09-960-352-5954	Sequence 5954, Ap
44	240.8	7.8	2672	10	US-09-776-191-9	Sequence 9, Appli
45	240.8	7.8	2672	16	US-10-156-214A-9	Sequence 9, Appli

ALIGNMENTS

RESULT 1
US-09-900-751-1
Sequence 1, Application US/09900751
Patent No US2002026553A1
GENERAL INFORMATION:
APPLICANT: Allen, Keith D
TITLE OF INVENTION: TRANSGENIC MICE CONTAINING SERINE
FILE REFERENCE: R-386
CURRENT APPLICATION NUMBER: US/09/900,751
CURRENT FILING DATE: 2001-07-06
PRIOR APPLICATION NUMBER: US 60/217,449
PRIOR FILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/223,170
PRIOR FILING DATE: 2000-08-07
PRIOR APPLICATION NUMBER: US 60/223,460
PRIOR FILING DATE: 2000-08-07
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 1
LENGTH: 3106
TYPE: DNA
ORGANISM: Mus musculus
US-09-900-751-1
Query Match 100.0%; Score 3106; DB 9; Length 3106;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 3106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CATGTTAGACGCTCCCGAGGAGCAGCGCTGAGACCGGCGATCGGACCGCAAA 60
DB 1 CATGTTAGACGCTCCCGAGGAGCAGCGCTGAGACCGGCGATCGGACCGCAAA 60
QY 61 CCAATGATGACATATGGGGCGGAGGCGGAGGCGGCTTCAAGACTTGGCGGGAGC 120
DB 61 CCAATGATGACATATGGGGCGGAGGCGGAGGCGGCTTCAAGACTTGGCGGGAGC 120


```

Db 2281 CTGCTGGCAAGGCGCATCTGGGTCAAGGCTGGGGGCAACAAAAGAGAGGTACCGAG 2340
Qy 2341 CGCTGATCTCTGCAAGAGGTGATCGGTGTCATCAACCAAGCACTGTGAGAGCTCA 2400
Db 2341 CGCTGATCTCTGCAAGAGGTGATCGGTGTCATCAACCAAGCACTGTGAGAGCTCA 2400
Qy 2401 TGCCGACAGCATCAACCCAGAGTANGTGTGAGGTTTCTCTAGTGGGGGTGTGACT 2460
Db 2401 TGCCGACAGCATCAACCCAGAGTANGTGTGAGGTTTCTCTAGTGGGGGTGTGACT 2460
Qy 2461 CTTGCCAGAGGTGACTGTGTGAGGCTTGTCAAGGCGGAGAAAGATGGGGAGTGTCC 2520
Db 2461 CTTGCCAGAGGTGACTGTGTGAGGCTTGTCAAGGCGGAGAAAGATGGGGAGTGTCC 2520
Qy 2521 AGGCTGTGTGTGAGTGTGAGGCTGAGGCTGCTCAGAGGAGCAAGGCTGTGACA 2580
Db 2521 AGGCTGTGTGTGAGTGTGAGGCTGAGGCTGCTCAGAGGAGCAAGGCTGTGACA 2580
Qy 2581 CAAAGGCTCCCTGTAGTTCGAGGATGATCAAGAGCACTGGGGTATAGCAGATGAC 2640
Db 2581 CAAAGGCTCCCTGTAGTTCGAGGATGATCAAGAGCACTGGGGTATAGCAGATGAC 2640
Qy 2641 AGACAGCCGACCAACCAACCAAGGATGCGGATGATGATGATGATGATGATGATG 2700
Db 2641 AGACAGCCGACCAACCAACCAAGGATGCGGATGATGATGATGATGATGATGATG 2700
Qy 2701 GAACATCTGAGCATTTATCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2760
Db 2701 GAACATCTGAGCATTTATCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2760
Qy 2761 GCATCTCTGAGCATTTATCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2820
Db 2761 GCATCTCTGAGCATTTATCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2820
Qy 2821 TTGCGTCTGAGCGGCGGAGCTGCGGAGCAAGGCTGATGATGATGATGATGATG 2880
Db 2821 TTGCGTCTGAGCGGCGGAGCTGCGGAGCAAGGCTGATGATGATGATGATGATG 2880
Qy 2881 CTGAGCTGGGTGAAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2940
Db 2881 CTGAGCTGGGTGAAGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2940
Qy 2941 GGGAGCCCTATGGAGAGAGGCTGAGGCTGAGGCTGAGGCTGAGGCTGAGGCTG 3000
Db 2941 GGGAGCCCTATGGAGAGAGGCTGAGGCTGAGGCTGAGGCTGAGGCTGAGGCTG 3000
Qy 3001 ACCCCAGAAAAGAGTGTACTAAGGCTGAAATGTTGTTGCTGTTGCGAGGGTGG 3060
Db 3001 ACCCCAGAAAAGAGTGTACTAAGGCTGAAATGTTGTTGCTGTTGCGAGGGTGG 3060
Qy 3061 TTGAAGATTAACATTTTATTTTAAAAA 3106
Db 3061 TTGAAGATTAACATTTTATTTTAAAAA 3106

```

RESULT 2

```

US-10-342-887-157
; Sequence 157, Application US/10342887
; Publication No. US20040058340A1
; GENERAL INFORMATION:
; APPLICANT: Dai, Hongyue
; APPLICANT: He, Yundong
; APPLICANT: Linsley, Peter S.
; APPLICANT: Mao, Mao
; APPLICANT: Roberts, Christopher J.
; APPLICANT: Van 't Veer, Laura Johanna
; APPLICANT: Bernards, Rene
; APPLICANT: Marc J.
; TITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Patients
; FILE REFERENCE: 9301-188-999
; CURRENT APPLICATION NUMBER: US/10/342,887
; CURRENT FILING DATE: 2003-01-15

```

```

; PRIOR APPLICATION NUMBER: 60/298,918
; PRIOR FILING DATE: 2001-06-18
; PRIOR APPLICATION NUMBER: 60/380,710
; PRIOR FILING DATE: 2002-05-14
; PRIOR APPLICATION NUMBER: 10/172,118
; PRIOR FILING DATE: 2002-06-14
; NUMBER OF SEQ ID NOS: 2699
; SEQ ID NO 157
; LENGTH: 3149
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-342-887-157

```

```

Query Match 60.8%; Score 1889.8; DB 13; Length 3149;
Best Local Similarity 81.4%; Pred. No. 0;
Matches 2222; Conservative 0; Mismatches 504; Indels 5; Gaps 3;

```

```

Qy 50 GACCGCCAAACATGAGTATGATCGGAGGCGGAGGCGGAGGCGGAGGCGGAGGCT 109
Db 23 GGCTCGGGAGCATAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 82
Qy 110 CGGCGGGAGCTCAAGTACATCTCCGCTTGAAGAACATGATGCTTTGAGAGGGTGT 169
Db 83 CGGCGGGAGCTCAAGTACATCTCCGCTTGAAGAACATGATGCTTTGAGAGGGTGT 142
Qy 170 GAGATTCTCTGCGAACAATGCGAAGAAAGTGAAGAAACGAGGCGGAGGCGGAGGCT 229
Db 143 GAGATTCTCTGCGAACAATGCGAAGAAAGTGAAGAAACGAGGCGGAGGCGGAGGCT 202
Qy 230 GGTGCTGTGAGGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 289
Db 203 GGTGCTGTGAGGAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 262
Qy 290 GTGGCACTTCTATTATGCAATGCTGCGGTTCAAAAAGTCTTCAATGCGGATGAGAT 349
Db 263 GTGGCACTTCTATTATGCAATGCTGCGGTTCAAAAAGTCTTCAATGCGGATGAGAT 322
Qy 350 CACAAATGAGATCTTTCTGAGTGGATGAGAACTGCACTCCAGAGATTATGAGCT 409
Db 323 CACAAATGAGATCTTTCTGAGTGGATGAGAACTGCACTCCAGAGATTATGAGCT 382
Qy 410 GGCAGCCAGGTGAAGAGAGGCTGAGTGTGATGATGATGATGATGATGATGATG 469
Db 383 GGCAGCCAGGTGAAGAGAGGCTGAGTGTGATGATGATGATGATGATGATGATG 442
Qy 470 CTACCAAGAAAGTGTGCTGATGCTGCTTCACTGAGGAGGAGGAGGAGGAGGAG 529
Db 443 CTACCAAGAAAGTGTGCTGATGCTGCTTCACTGAGGAGGAGGAGGAGGAGGAG 502
Qy 530 GTCAAGATTCAAGATCCCGGACACCTGCGAGAGAGGATGATGCGGCAATGGCTGGA 589
Db 503 GTCAAGATTCAAGATCCCGGACACCTGCGAGAGAGGATGATGCGGCAATGGCTGGA 562
Qy 590 GCGAGTTGATACATTGCAACCCGAGCAAGGAGGAGGAGGAGGAGGAGGAGGAGG 649
Db 563 GCGAGTTGATACATTGCAACCCGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 622
Qy 650 GGTGGCTTCCCATTTAGACCCGAGATGCTGAGAGAGTCAAGCAACAGCTGAGTT 709
Db 623 GGTGGCTTCCCATTTAGACCCGAGATGCTGAGAGAGTCAAGCAACAGCTGAGTT 682
Qy 710 TGCCGTGATCCCATTTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 769
Db 683 TGCCGTGATCCCATTTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 742
Qy 770 TCCCTAATCCGAGGAGTCCGCTGCGAGTGGATCTGCGGAGGAGGAGGAGGAGG 829
Db 743 CCCCACCCCGCTATGCTGCTGCGAGTGGATGGGCTTGGGGGAGGAGGAGGAGGAG 802
Qy 830 GAGCTCACTTCCGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 889
Db 803 GAGCTCACTTCCGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 862

```



```

; PRIOR APPLICATION NUMBER: 60/380,770
; PRIOR FILING DATE: 2002-05-14
; NUMBER OF SEQ ID NOS: 2699
; SEQ ID NO 157
; LENGTH: 3149
; TYPE: DNA
; ORGANISM: Homo sapiens
; PUBLICACION INFORMATION:
; DATABASE ACCESSION NUMBER: AF118224
; DATABASE ENTRY DATE: 2001-06-18
US-10-172-118-157

```

Query Match	60.8%;	Score 1889.8;	DB 13;	Length 3145;
Best Local Similarity	81.4%;	Pred. No. 0;		
Matches 222;	Conservative	0;	Mismatches 504;	Indels 5;
				Gaps 3

QY	50	GACCGCGAACA	CCATGGGTATGCATATGGGGCGCGAAGCGCGAGGGGCTTCAGACTT	109
Db	23	GGCCTGGGGAC	CCATGGGAGCGCATGGGCGCGCAAGGGCGGAGGGGGCCGAGACTT	82
QY	110	CGCGCGGGAG	CTCAATGACATCCCGGCTAGAGAACATGAATGGCTTTGAGAGGGTGT	169
Db	83	CGCGCGGGAG	CTCAATGACATCCCGGCAACAGAAAGTGAATGGCTTTGAGAGAGGGGT	142
QY	170	GAGATTCCTG	CGCCAGAACATGCCAGAAAGTGAAGAGCGAGGCCCGACGGCTGTGGT	229
Db	143	GAGATTCCTG	CGCCAGAACATGCCAGAAAGTGAAGAAAGCTATGCCCCGGGGCGCTGGGT	202
QY	230	GGTGTGTGG	CAGTGTCTGTTCAGCTTCCTCTTGGCTCCCTCATAGCTGGCTGTGGT	289
Db	203	GGTGTGTGG	CAGCTGGCTGTATGGCTCTCTTGTGTCTTGTGGGGATCGGCTTCTGGT	262
QY	290	GTGGCACTT	CAATTCGGAATGTGCGGGTTCAAAAGTCTTCAATGAGCATGTAGAGAT	349
Db	263	GTGGCACTT	CAATTCGGAATGTGCGGGATGTCCAGAAAGTCTTCAATGAGCATGTAGAGAT	322
QY	350	CACAAATGAG	CTTTCTGGATGGCGTATGAGAACTTCCACTTCCACAGATTATCAGCTT	409
Db	323	CACAAATGAG	ATTTTGTGATGCTTACGAAAGCTTCCACTCAGTGGATTGTAAAGCTT	382
QY	410	GGCCACGAG	GTGAAGAGCGGCTGMACTGTGACATGAAGTCCCTGTCGGGGTCC	469
Db	383	GGCCACGAG	GTGAAGAGCGGCTGMACTGTGACAGCGGAATCCCATTTCTGGGCC	442
QY	470	CTACCAAGAA	GTGGCTGTATACCTCTTAAGAGGCGAGTGTCAATCGCTACTACTG	529
Db	443	CTACCAAGAA	GTGGCTGTATGAGCGGCTTACGAGAGGGCGAGCTCAATCGCTACTACTG	502
QY	530	GTCAAGATT	CAGATCCCCCACAACCTGGCGAGAAAGGTGTATGCGGCCATATGGTGTGGA	589
Db	503	GTCTGATT	CAGATCCCCGAGCACTGTGTGAGAGAGGCCGAGCTCAATGGCCGAGGA	562
QY	590	GCGATTTGA	CAATTGGCCATCCCCGAGCACTGGGCACTGAATTCCTTGTGTCAATCTGT	649
Db	563	GCGATTTGA	CAATGCTGCCCCCGCGGGGCGGCTCCTGAATTCCTTGTGTGTCACTGAT	622
QY	650	GGTGGCCTT	CCCCATTGACCCCAAGTGTGCGAGAGACCTCAGAGAACAGCTGCAGTTT	709
Db	623	GGTGGCCTT	CCCCAGCACTTCAAAACATGACAGAGACCCAGAGAACAGCTGCAGCTT	682
QY	710	TGCGCTGAT	GCCATGAGTCAAGCAAGCTTCACTACCCCTGGCTTCCCCAACAG	769
Db	683	TGCGCTGAT	GCCATGAGTCAAGCTGAGCTGATGCGCTTCAACAGGCCCGGCTTCCCTGACAG	742
QY	770	TCCCTTAC	CCCGGCGATGCGCGGTGCGAGTGGGTCTTGCGGGGGAGAGCGGACTTGTGCT	829
Db	743	CCCTTAC	CCCGGCTATGCCGCTGCAATGAGTGGGCTTGCGGGGGAGAGCGGACTGATGT	802
QY	830	GAGCTTCA	CCCTTCGAAGCTTTGATGTGCTTCCCTGTGAATGAGCATGGCAGTGA	889
Db	803	GAGCTTCA	CCCTTCGAGCTTTGACCTTGTGCTGTGAGAGAGCGGCGGAGAGCACTGTGT	862
QY	890	CACGGTAT	GATAGCTGAGCCCATGAAACCCCAACGCTGTGTGTGTCGGCTGTGTGGCAC	949

Db	863	GACGGTGTACAAACACCTGAGCCCAATGAGGCCACGCGCTGGTGAATGTGTGGCAC	9222
QY	950	CTTCTCAACCTCTACAACTGACTTTCTCTCTCTCCAGAAAGTCTCTCTGTACAGCT	100
Db	923	CTACCTCTCCCTCTACAACTGAGCTTTCACCTCTCTCCAGAAAGTCTCTGTACACACT	9822
QY	1010	GATTAACCAATATCTGACCGCGGACATCTGTGCTTTGAGGCCACTTCTTCAGCTGCCAA	106
Db	983	GATTAACCAACATGTAGGGGGGGGACATCCGGCTTTGAGGCCACTTCTTCAGCTGCCAG	104
QY	1070	GATGAGAGCTGTGGCGGCTTTTGTGATGACACCCAAAGGACATTTAGCAGCCCTTACTA	112
Db	1043	GATGAGAGCTGTGGAGGCCGCTTAGGTAAAGCCCAAGGGGACATTCAGAGCCCTTACTA	110
QY	1130	TCGAGGCACTACCCGCCCAACATCACTGACATGGAATATGAAGGTGCCCAACAAACCG	118
Db	1103	CCGAGGCACTACCCCAACCAATGACTGTGACATGGAACATTTAGGTGCCCAACAAACCA	116
QY	1190	GAACGTGAAGTGGCGCTTCAAACTCTTCTATCTGTGAGACCCCAACGTACAGATGGGCT	124
Db	1163	GCAATGTGAAGTGGCGCTTCAAACTCTTCTATCTGTGAGACCCCAACGTACAGATGGGCT	122
QY	1250	CTGCACCAAGGACTATGTGGAAGTTCACAGGGGAGAAAGTCTGCGGTGAGAGGTCCAGTT	130
Db	1223	CTGCCCCAAGGACTATGTGGAAGTTCACATGGGAGAAATCTGCGAGAGGTCCAGTT	128
QY	1310	TGTGTGAGCAGCAGCAGCAGCAGATTCACGTTCACCTTCCATTCGATCCTCGTAGAC	136
Db	1283	CGTCGTCACAGCAACAGCAACAGATTCACAGTTGCTTCCTCAGATCAGTCTTACAC	134
QY	1370	GGAACCCGGGCTCTTAGCTGAGTACTCTCTTACAGCTTCACAGACCCGCTGCCAAGGAT	142
Db	1343	CGACACCGGCTCTTAGCTGAAATCCTCTCTACAGCTCTCAATGACCATGCGCGGGGGA	140
QY	1430	GTTCAATGTGACAGCAGCAGCGGTGATCCGAAAGAACCTGCGCTGCCAGCGTGGGACGA	148
Db	1403	GTTCAATGTGACCGCAGCGGGCGGTGTATCCGAAAGAGGTGCGCTGTGATGCTGTGGCGGA	146
QY	1490	CTGCCCGATTATAGTGTGAGCGTTTACCTGCGATGTCAGTGCACCCACGAGTTTCAACGTG	154
Db	1463	CTGCAACCGACCAACAGCATGAGCTCACTGACAGTTGGCCAGCGCGGCAACAGTTTCAACGTG	1522
QY	1550	CAAAAACCAATTTCTGCAAGCCCTCTTCTGTGGGTCTGTGACAGTGTCAACGACTGTGGGGA	1609
Db	1523	CAGGAACCAATTTCTGCAAGCCCTCTTCTGTGGGTCTGTGACAGTGTGAAACGACTGTGGGGA	1582
QY	1610	CGGAAGTACAGAGGGGCTGCAAGCTGTCTGTCTGGGAGTTTCAAGTGTTCGAATGGGAA	1669
Db	1583	CACAGCGACAGAGGGGCTGCAAGTGTCTGTCTGGGAGTTTCAAGTGTTCGAATGGGAA	1642
QY	1670	GTTCTCCCTCAGAGCCAGAGTGTAAATGGGAAAGAACCTGTGGAATAGTGTCTGACGA	1729
Db	1643	GTTCTCCCTCAGAAAGCCAGCAGTGTCAATGGGAAGAGCAGCTGTGGGAGCGGATCCGACGA	1702
QY	1730	GAGCTTCATGTGACAGCGTGAATGTGCTCTTCTGACCAAAATATACCTAACCGCTGCCAAA	1789
Db	1703	GAGCTTCATGTGACAGCGTGAATGTGCTCTTCTGACCAAAATATACCTAACCGCTGCCAAA	1762
QY	1790	TGGGCTCTGTCTGAGCAAGGCGAACCTTGAGTGTGATGGAAGACGCACTGTAGCGATGG	1849
Db	1763	TGGGCTCTGTCTGAGCAAGGCGAACCTTGAGTGTGATGGAAGAGGACGTAAGCGACGG	1822
QY	1850	CTCCGATGAGAAAACTGTGACTGTGGGCTGGCATCTTTTCAAAACAGGCTGCGTGTGT	1909
Db	1823	CTCCGATGAGAAAGACTGTGACTGTGGGCTGGCATCTTTTCAACAGCAAGGCTGCGTGTGT	1882
QY	1910	TGCTGTGACGAATGTGCGACAGAGGCGAGTGGCCCTGTGACAGTGTGAGCTTCCAGCCCTGGG	1969
Db	1883	TGCTGTGACGAATGTGCGATGAGGCGAGTGTGGCCCTGTGACAGTGTGAGCTTGTGG	1942
QY	1970	CCAGGGGCAATTGTGTGGGCGCTGTGACTCTCTGACTGGCTGTGTCTTGACCTTA	2029

```

Db      1943  CAGAGCCACATCTGGGCTCTCCCTCATCTCTCCCAATGGTGGTCTGCGGCACA 2002
QY      2030  TTGCTTTAGATGACAAAATTTCAGTACTACATACAGATGAGCGCCCTTCT 2089
Db      2003  CTGCTACATGATGACAGAGATTCAGTACTACAGACCCAGCAGTGGACGCGCTTCT 2062
QY      2090  GGGTCTGCTGAGACCAAGAGCGAGTCTCTGGGGTGCAGAGACTGAAGCTCAAG 2149
Db      2063  GGGCTTGACAGACCAAGCGAGCGCGCCCTGGGGTGCAGAGACTGAAGCTCAAG 2122
QY      2150  TATCATACCCACCTTCTCTCAATGATTTACCTTGAATGACATGCTGCTGCTGA 2209
Db      2123  CATCATCTCCACCTTCTCTCAATGATTTACCTTGAATGACATGCTGCTGCTGA 2182
QY      2210  GCTGAGAAAGTGGTGGAGTACAGCACCGTCTGCGCCCTCATCTGCTGCGCTTC 2269
Db      2183  GCTGAGAAAGTGGTGGAGTACAGCACCGTCTGCGCCCTCATCTGCTGCGCTTC 2242
QY      2270  CCACTCTCTCCCTGCTGAGGAGGCACTGGGTCAAGGCTGGGGGCAACAAAAGAG 2329
Db      2243  CCACTCTCTCCCTGCTGAGGAGGCACTGGGTCAAGGCTGGGGGCAACAAAAGAG 2302
QY      2330  AGGTACCGAGCGCTGATCTCTGAGAGAGGTGAGATCCGTATCAACCAAGCAGCT 2389
Db      2303  AGGCATCTGGCGCGCTGATCTCTGAGAGAGGTGAGATCCGTATCAACCAAGCAGCT 2362
QY      2390  TGAAGACCTATGCGCGAGACATCAACCAAGTATGTTGGGTCTTCTCAGTGG 2449
Db      2263  CGAAGACCTCTGCGCGAGACATCAACCAAGTATGTTGGGTCTTCTCAGTGG 2422
QY      2450  GGGTGTGACCTCTGCGAGGAGTCTGCTGCGCCCTTGTCAAGCGCGAGAAAGATG 2509
Db      2423  CGGGTGTGACCTCTGCGAGGAGTCTGCTGCGCCCTTGTCAAGCGCGAGAAAGATG 2482
QY      2510  GCGAATCTTCAGGCTGTGTGTGAGCTGGAGTGAAGGCTGGCTCAAGAGAAACAGCC 2569
Db      2483  GCGAATCTTCAGGCTGTGTGTGAGCTGGAGTGAAGGCTGGCTCAAGAGAAACAGCC 2542
QY      2570  AGGGGTGTGACAAAGGCTCTGTAGTTCGAGACTGATCAAAAGAGCACTGGGGTATA 2629
Db      2543  AGGGGTGTGACAAAGGCTCTGTAGTTCGAGACTGATCAAAAGAGCACTGGGGTATA 2602
QY      2630  GCAGATGACAGACAGCGGCAACCAACAGGAGTCCGAGATGACACCTGG 2689
Db      2603  GGGGCGGGG---GCCAACCAGATGTGTACCTGGGGGCCAACCATGTCCACCCAGT 2659
QY      2690  ATACAGAGAGAACTGACGACATTTATGCTGTGGCTTCCCGCCCAACACACCA 2749
Db      2660  GTGACAG--CTGACAGGCTGGAGACTGACCGCTGACTGACACGAGGCCC--CGAGAACATA 2717
QY      2750  GACTGTGAATGCTGCTTTAGACTCAGAT 2780
Db      2718  CACTGTGAATGCTGCTTTAGACTCAGAT 2748

```

```

RESULT 4
US-10-295-027-968
; Sequence 968, Application US/10295027
; Publication No. US2003023250A1
; GENERAL INFORMATION:
; APPLICANT: Afar, Daniel
; APPLICANT: Aziz, Natasha
; APPLICANT: Ginsberg, Wendy M.
; APPLICANT: Gish, Kurt C.
; APPLICANT: Glynn, Richard
; APPLICANT: Hevizi, Peter A.
; APPLICANT: Mack, David H.
; APPLICANT: Murray, Richard
; APPLICANT: Watson, Susan R.
; APPLICANT: Eos Biotechnology, Inc.
; TITLE OF INVENTION: Methods of Diagnosis of Cancer, Compositions and
; TITLE OF INVENTION: Methods of Screening for Modulators of Cancer
; FILE REFERENCE: 018501-012500US

```

```

; CURRENT APPLICATION NUMBER: US/10/295,027
; CURRENT FILING DATE: 2002-11-13
; PRIOR APPLICATION NUMBER: US 09/663,733
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/350,666
; PRIOR FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: US 60/335,394
; PRIOR FILING DATE: 2001-11-15
; PRIOR APPLICATION NUMBER: US 60/332,464
; PRIOR FILING DATE: 2001-11-21
; PRIOR APPLICATION NUMBER: US 60/334,393
; PRIOR FILING DATE: 2001-11-29
; PRIOR APPLICATION NUMBER: US 60/340,376
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: US 60/347,211
; PRIOR FILING DATE: 2002-01-08
; PRIOR APPLICATION NUMBER: US 60/347,349
; PRIOR FILING DATE: 2002-01-10
; PRIOR APPLICATION NUMBER: US 60/355,250
; PRIOR FILING DATE: 2002-02-08
; PRIOR APPLICATION NUMBER: US 60/356,714
; PRIOR FILING DATE: 2002-02-13
; Remaining Prior Application data removed - See file wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1386
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 968
; LENGTH: 3149
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-295-027-968

```

```

Query Match 60.8%; Score 1889.8; DB 16; Length 3149;
Best Local Similarity 81.4%; Pred. No. 0;
Matches 2222; Conservative 0; Mismatches 504; Indels 5; Gaps 3;

```

```

QY      50  GACCGCAAAACCATGGGTAGCATCGGGCGCAAGCGCGAGGCGCTCTCAGACTT 109
Db      23  GGCCTCGGGACATGGGAGACCATCGGCCCGCAAGGCGGAGGCGCGCAAGACTT 82
QY      110  CGGCGCGGACTCAAGTACAACTCCCGCTAGAGAACATGATGCTTTGAGAGGGT 169
Db      83  CGGCGCGGACTCAAGTACAACTCCCGCAAGGAGTATGCTTTGAGAGAGGGT 142
QY      170  GGAATCTCTGCTCTGCAACATGCGCAAGAGTGAAGAGGAGGCGCGCTGGT 229
Db      143  GGAATCTCTGCTCTGCAACATGCGCAAGAGTGAAGAGGAGGCGCGCTGGT 202
QY      220  GGTGTGGTGGCAGGCTGTTCAGCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 289
Db      203  GGTGTGGCAGGCTGTTCAGCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 262
QY      290  GTGGCACTTCATATCGAAATGTGCGGGTTCAAAAGTCTTCAATGGCATCTGAGAT 349
Db      263  GTGGCACTTCATATCGAAATGTGCGGGTTCAAAAGTCTTCAATGGCATCTGAGAT 322
QY      350  CACAAATGATCTTTCTGAGATGCGTATGAGAACTCCACTCCACAGATTATCAGCT 409
Db      323  CACAAATGATCTTTCTGAGATGCGTATGAGAACTCCACTCCACTGATTTGTAAGCT 382
QY      410  GGCAGCGAGTGAAGAGGCGCTGAGCTGTGTAAGTGAAGTCCCTGCTGGGTTC 469
Db      383  GGCAGCGAGTGAAGAGGCGCTGAGCTGTGTAAGTGAAGTCCCTGCTGGGTTC 442
QY      470  CTACCAAGAAAGTGGCTGTAACTGCTCTTCACTGAGGAGCAATGCTGCTACTAGT 529
Db      443  CTACCAAGAAAGTGGCTGTAACTGCTCTTCACTGAGGAGCAATGCTGCTACTAGT 502
QY      530  GTACAGTTCACAGATCCCGCCACACCTGGCAGAAAGTGTATCGCCCATGGCTTGA 589
Db      503  GTCTGAGTTCACAGATCCCGCCACACCTGGTGAAGAGGCGGAGCGGTATGCGCAG 562
QY      590  GCGAGTGTAACTTCCACCCCGAGACGCGGCACTGAATCTTGTGTCAATCTGT 649

```

Db 563 GCGCGTAGTCATGCTGCCCCCGGGCGGCTCCCTGAAGTCTTTGTGTCACTCACT 622
 QY 650 GGTGGCCTTCCCGCAATGACCCAGAAATGCTGAGAGACTAGACAAACAGCTGCAATT 709
 Db 623 GGTGGCTTCCCGCAAGCTCCAAACAGTACAGAGAGCCAGAGCAACAGCTGCACTT 682
 QY 710 TGCCCTGCAATGCTGAGAGAGTGAACAGCTTCACTACCCCTGCTTCCCAAG 769
 Db 683 TGGCTGAGAGCCCGGGTGTGAGAGTATGCTTCAACAGCCCGCTTCCCTGACAG 742
 QY 770 TCCCTACCCGGGCAATGCTGCTGCAATGAGTCTTCTGAGAGAGAGCCAGCTGCT 829
 Db 743 CCCCCTACCCGCTCATGCTGCTGCAATGAGTCTTCTGAGAGAGAGCCAGCTGCT 802
 QY 830 GAGCTCACTCCGAGAGCTTGAATGCTGCTTCTGAGAGAGAGAGAGAGAGAGAG 889
 Db 803 GAGCTCACTCCGAGAGCTTGAATGCTGCTTCTGAGAGAGAGAGAGAGAGAGAG 862
 QY 890 CACCTGTATGATGCTGAGAGCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 949
 Db 863 GAGCTGTATGATGCTGAGAGCCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 922
 QY 950 CTTCTCACTCCGAGAGCTTGAATGCTGCTTCTGAGAGAGAGAGAGAGAGAGAG 1009
 Db 923 CTAACCTCCCTCAACAGCTGAGCTTCACTCTCTCCAGAGAGAGAGAGAGAGAG 982
 QY 1010 GATACCAATACAG 1069
 Db 983 GATACCAATACAG 1042
 QY 1070 GATGACAG 1129
 Db 1043 GATGACAG 1102
 QY 1130 TCCAGGAG 1189
 Db 1103 CCAAGGAG 1162
 QY 1190 GAAAGGAG 1249
 Db 1163 GAAAGGAG 1222
 QY 1250 CTGCAACAG 1309
 Db 1223 CTGCAACAG 1282
 QY 1310 TGTGTGAG 1369
 Db 1283 GGTGTGAG 1342
 QY 1370 GAAAGGAG 1429
 Db 1343 GAAAGGAG 1402
 QY 1430 GTTATGAG 1489
 Db 1403 GTTATGAG 1462
 QY 1490 CTGCTGAG 1549
 Db 1463 CTGCTGAG 1522
 QY 1550 CAAAGGAG 1609
 Db 1523 CAAAGGAG 1582
 QY 1610 CGAAGGAG 1669
 Db 1583 CGAAGGAG 1642
 QY 1670 GTGTCTCCCTGAG 1729
 Db 1643 GTGTCTCCCTGAG 1702

QY 1730 GCTTCAATGAG 1789
 Db 1703 GCTTCAATGAG 1762
 QY 1790 TGGCTGTGTGAG 1849
 Db 1763 TGGCTGTGTGAG 1822
 QY 1850 CTCCGATGAG 1909
 Db 1823 CTCCGATGAG 1882
 QY 1910 TGGTGAG 1969
 Db 1883 TGGTGAG 1942
 QY 1970 CAAAGGAG 2029
 Db 1943 CAAAGGAG 2002
 QY 2030 TTGCTTTCAAG 2089
 Db 2003 TTGCTTTCAAG 2062
 QY 2090 GGGCTGTGAG 2149
 Db 2063 GGGCTGTGAG 2122
 QY 2150 TATCATCAACCACTTCTCTTCAATGATTTCACTTCACTTCACTTCACTTCACT 2209
 Db 2123 TATCATCAACCACTTCTCTTCAATGATTTCACTTCACTTCACTTCACTTCACT 2182
 QY 2210 GCTGAG 2269
 Db 2183 GCTGAG 2242
 QY 2270 CCATGCTTCCGCTGAG 2329
 Db 2243 CCATGCTTCCGCTGAG 2302
 QY 2330 AGGTAACGAG 2389
 Db 2303 AGGTAACGAG 2362
 QY 2390 TGAAG 2449
 Db 2363 TGAAG 2422
 QY 2450 GGGTGTGAG 2509
 Db 2423 GGGTGTGAG 2482
 QY 2510 GCGAATGTTCCAG 2569
 Db 2483 GCGAATGTTCCAG 2542
 QY 2570 AGGAGTGTGAG 2629
 Db 2543 AGGAGTGTGAG 2602
 QY 2630 GCAAGTGTGAG 2689
 Db 2603 GCAAGTGTGAG 2659
 QY 2690 ATACAG 2749
 Db 2660 ATACAG 2717
 QY 2750 GACTGTGAG 2780
 Db 2718 GACTGTGAG 2748

RESULT 5

US-09-776-191-1

Sequence 1, Application US/09776191
Publication No. US20030119168A1

GENERAL INFORMATION:

APPLICANT: Edwin L. Madison

APPLICANT: Edgar O. Ong

APPLICANT: Jiumn-Chern Yeh

APPLICANT: Corvas International, Inc.

TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING TRANSMEMBRANE SERINE PROTEASES, THE ENCODED PROTEINS AND

TITLE OF INVENTION: METHODS BASED THEREON

FILE REFERENCE: 24745-1607

CURRENT APPLICATION NUMBER: US/09/776,191

CURRENT FILING DATE: 2001-02-02

PRIOR APPLICATION NUMBER: 60/213,124

PRIOR FILING DATE: 2000-06-22

PRIOR APPLICATION NUMBER: 60/234,840

PRIOR FILING DATE: 2000-06-22

PRIOR APPLICATION NUMBER: 60/179,982

PRIOR FILING DATE: 2000-02-03

PRIOR APPLICATION NUMBER: 60/183,542

PRIOR FILING DATE: 2000-02-18

PRIOR APPLICATION NUMBER: 09/657,968

PRIOR FILING DATE: 2000-02-08

NUMBER OF SEQ ID NOS: 72

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 1

LENGTH: 3147

TYPE: DNA

ORGANISM: Homo Sapien

FEATURE:

OTHER INFORMATION: Nucleotide encoding MTP1

NAME/KEY: CDS

LOCATION: (23)...(2589)

PUBLICATION INFORMATION:

AUTHORS: O'Brien, T.J. and Tanimoto, H.

DATABASE ACCESSION NUMBER: Genbank AF081724

PATENT DOCUMENT NUMBER: US Pat 5972616

PUBLICATION DATE: 1999-10-26

US-09-776-191-1

Query Match 60.6%; Score 1883.2; DB 10; Length 3147;
Best Local Similarity 81.2%; Pred. No. 0;

Matches 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3;

QY 45 GATCGGACCGCCAAACCATGAGTGAAGTGGGCGGCGGAGGCGGAGGCGGCTCTCAG 104
DB 5 GAGCGCGCTCGGGGTACCATGAGGAGCGATCGGGCCCGCAAGGCGGAGGCGGCGGAGG 64
QY 105 GACTTCGGGCGGCGGAGTCAAGTACACTCCCGCTAGAGAACATGATGCTTTGAGAG 164
DB 65 GACTTCGGGCGGCGGAGTCAAGTACACTCCCGGCAAGAGAGTGAATGCTTTGAGAG 124
QY 165 GGTGTGAGTCTCTGCTGCGAACAATGCGAAGAAAGTGAAGAGAGAGGCGGCGGCGG 224
DB 125 GCGGTGAGTCTCTGCTGCGAACAATGCGAAGAAAGTGAAGAGAGAGGCGGCGGCGG 184
QY 225 TGGGTGAGTCTCTGCTGCGAACAATGCGAAGAAAGTGAAGAGAGAGGCGGCGGCGG 284
DB 185 TGGGTGAGTCTCTGCTGCGAACAATGCGAAGAAAGTGAAGAGAGAGGCGGCGGCGG 244
QY 285 TGGGTGAGTCTCTGCTGCGAACAATGCGAAGAAAGTGAAGAGAGAGGCGGCGGCGG 344
DB 245 TGGGTGAGTCTCTGCTGCGAACAATGCGAAGAAAGTGAAGAGAGAGGCGGCGGCGG 304
QY 345 AGGATCAACAATGAGATCTTTCTGATGCGTATGAAGATCCCACTCCCAAGAGTTATC 404
DB 305 AGGATCAACAATGAGATCTTTCTGATGCGTATGAAGATCCCACTCCCAAGAGTTATC 364
QY 405 AGCTGCGCAGCCAGGTGAAGAGAGGCGGCTGAGAGTGTATCAATGAATCCCTGCTCG 464

DB 365 AGCTGCGCAGCCAGGTGAAGAGAGGCGGCTGAGAGTGTATCAATGAATCCCTGCTCG 424
QY 465 GGTGCTTACCAACAAGAGTGGCTGTAATGCTCTTCAAGTGAAGGAGTGTATGCTTAC 524
DB 425 GGTGCTTACCAACAAGAGTGGCTGTAATGCTCTTCAAGTGAAGGAGTGTATGCTTAC 484
QY 525 TACTGTGAGATGAGTGAAGTCCCGGCAAGTGGCGAAGAGAGTGTATGCTTACGCTTAC 584
DB 485 TACTGTGAGATGAGTGAAGTCCCGGCAAGTGGCGAAGAGAGTGTATGCTTACGCTTAC 544
QY 585 TGGAGAGAGTGTATGATTTGCGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 644
DB 545 GAGAGAGAGTGTATGATTTGCGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 604
QY 645 TCTGTGAGAGTGTATGATTTGCGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 704
DB 605 TCTGTGAGAGTGTATGATTTGCGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 664
QY 705 AGTTTGGCTGAGTGGAGTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 764
DB 665 AGTTTGGCTGAGTGGAGTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 724
QY 765 AACAGTCCCTTACCGGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 824
DB 725 GACAGCCCTTACCGGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 784
QY 825 GTGCTGAGCTTACCTTCCGAAAGTGTATGATGCTCTCTCTCTCTCTCTCTCTCTCTCT 884
DB 785 GTGCTGAGCTTACCTTCCGAAAGTGTATGATGCTCTCTCTCTCTCTCTCTCTCTCTCT 844
QY 885 CTGTGACCGGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 944
DB 845 CTGTGACCGGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 904
QY 945 GGCACCTTTCACCGCTCTTCAACCTGACTTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1004
DB 905 GGCACCTTTCACCGCTCTTCAACCTGACTTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 964
QY 1005 AACGCTGATTAACCAATACCTGACCGGCGGAGATCTGCTGCTTGAAGGCACTTTTCAAG 1064
DB 965 AACGCTGATTAACCAATACCTGACCGGCGGAGATCTGCTGCTTGAAGGCACTTTTCAAG 1024
QY 1065 CCAAGATGAGAGTGTGAGGAGGCTTTTGAAGTGAACCAAGGAGATTTAGAGAGAGG 1124
DB 1025 CCAAGATGAGAGTGTGAGGAGGCTTTTGAAGTGAACCAAGGAGATTTAGAGAGAGG 1084
QY 1125 TACTATCCAGGCACTTACCGGCGGCAACATGACATGATGATGATGATGATGATGATG 1184
DB 1085 TACTATCCAGGCACTTACCGGCGGCAACATGACATGATGATGATGATGATGATGATG 1144
QY 1185 AACCGGAAAGTGAAGAGTGGCTTCAACTCTTATCTGTGTGAGAGAGAGAGAGAGAG 1244
DB 1145 AACCGGAAAGTGAAGAGTGGCTTCAACTCTTATCTGTGTGAGAGAGAGAGAGAGAG 1204
QY 1245 GGTCTCTGACCAAGAGTATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1304
DB 1205 GGTCTCTGACCAAGAGTATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1264
QY 1305 CAGTTTGTGAG 1364
DB 1265 CAGTTTGTGAG 1324
QY 1365 TACAGGAG 1424
DB 1325 TACAGGAG 1384
QY 1425 GAGATTTATGATGAG 1484
DB 1385 GAGATTTATGATGAG 1444
QY 1485 GAGATTTATGATGAG 1544

Db 245 CTGTGTGTCATTTGCAATTCGAGGACGTGCTGTCCAGAGGTCTTCAATGCTATCATG 304
QY 345 AGGATCACAATATGAGATCTTTCTGTGATGCGTATGAGAACTCCACTTCCACAGATTATC 404
Db 305 AGGATCACAATATGAGATTTTGTGATGCTACGAGAACTCCAACTCCACTGATGTGTA 364
QY 405 AGCTGTCCAGCCAGGTGAGAGAGGCGCTGAAAGCTGTGATCAATGAAGCCCTGTCTG 464
Db 365 AGCTGTCCAGCCAGGTGAGAGAGGCGCTGAAAGCTGTGATCAATGAAGCCCTGTCTG 424
QY 465 GGTCCCTACCAAGAAGTGGCTGTAACTGCTTCAAGTAGAGGAGGTGTATCGCTTAC 524
Db 425 GGTCCCTACCAAGAAGTGGCTGTAACTGCTTCAAGTAGAGGAGGTGTATCGCTTAC 484
QY 525 TACTGTGATGATTCAGATTCCTCCCACTCTGCGAAGAAAGTTATCGCGCTATGCT 584
Db 485 TACTGTGATGATTCAGATTCCTCCCACTCTGCGAAGAAAGTTATCGCGCTATGCT 544
QY 585 GTGAGAGGATTTGTAATTTGCAACCCCGAGACGGGCACTTAAATCTTCTGTCTACA 644
Db 545 GAGAGAGGATTTGTAATTTGCAACCCCGAGACGGGCACTTAAATCTTCTGTCTACA 604
QY 645 TCTGTGTGATGCTTCCCATTTGACCCCAAGATGCTGAGAGAACTCAGAACAGCTGC 704
Db 605 TCAATGTGATGCTTCCCATTTGACCCCAAGATGCTGAGAGAACTCAGAACAGCTGC 664
QY 705 AGTTTGTGATGCTTCCCATTTGACCCCAAGATGCTGAGAGAACTCAGAACAGCTGC 764
Db 665 AGTTTGTGATGCTTCCCATTTGACCCCAAGATGCTGAGAGAACTCAGAACAGCTGC 724
QY 765 AACAGTCCCTACCGGCGGATGCGCGGCTGAGAGGCTGCGGCGGAGAGCGGAGCT 824
Db 725 GACAGGCTTACCGGCGGATGCGCGGCTGAGAGGCTGCGGCGGAGAGCGGAGCT 784
QY 825 GTGTGAGGCTTACCGGCGGATGCGCGGCTGAGAGGCTGCGGCGGAGAGCGGAGCT 884
Db 885 GTGTGAGGCTTACCGGCGGATGCGCGGCTGAGAGGCTGCGGCGGAGAGCGGAGCT 944
QY 845 CTGTGAGGCTTACCGGCGGATGCGCGGCTGAGAGGCTGCGGCGGAGAGCGGAGCT 904
Db 945 GGCACCTTCTACCGGCGGATGCGCGGCTGAGAGGCTTCTCTCCAGAAAGCTTCTCTG 1004
QY 905 GGCACCTTCTACCGGCGGATGCGCGGCTTCTCTCTCTCTCTCTCTCTCTCTCTCT 964
Db 1005 AGCTGATTAACAATATGATGACCGGAGATCTGTGAGGCTTCTCTCTCTCTCTCTCT 1064
QY 965 ACCTGATTAACAATATGATGACCGGAGATCTGTGAGGCTTCTCTCTCTCTCTCTCT 1024
Db 1065 CCGAAGATGAGAGCTGTGCGGCTTTTGAAGTACACCCAGAGGAACTTTAGCAGCGCC 1124
QY 1025 CCGAAGATGAGAGCTGTGCGGCTTTTGAAGTACACCCAGAGGAACTTTAGCAGCGCC 1084
Db 1125 TACTATCAAGGCTTACCGGCGGATGCGCGGCTTCTCTCTCTCTCTCTCTCTCTCT 1184
QY 1085 TACTATCAAGGCTTACCGGCGGATGCGCGGCTTCTCTCTCTCTCTCTCTCTCTCT 1144
Db 1185 AACCGGAAGTGAAGGTGCGCTTCAACTCTTCTATCTGTGTGAGCCCAAGTCAAGT 1244
QY 1245 AACCGGAAGTGAAGGTGCGCTTCAACTCTTCTATCTGTGTGAGCCCAAGTCAAGT 1204
Db 1245 GGTCTCTGCAACGAGATCTATGTGAGATCAACGGGAGAAAGTACGCGGTGAGAGTGC 1304
QY 1205 GGTCTCTGCAACGAGATCTATGTGAGATCAACGGGAGAAAGTACGCGGTGAGAGTGC 1264
Db 1305 CAGTTGTGTGAGCAACGAGATCTATGTGAGATCAACGGGAGAAAGTACGCGGTGAG 1364
QY 1265 CAGTTGTGTGAGCAACGAGATCTATGTGAGATCAACGGGAGAAAGTACGCGGTGAG 1324
Db 1365 TACAGGAGCAACGAGATCTATGTGAGATCTATGTGAGATCAACGGGAGAAAGTAC 1424
QY 1325 TACAGGAGCAACGAGATCTATGTGAGATCTATGTGAGATCAACGGGAGAAAGTAC 1384

QY 1425 GGAATGTCATGTGCAAGAAGTGAACGCTGATCCGAAAGAACTGCGCTGCCAGCGCTGG 1484
Db 1385 GGAATGTCATGTGCAAGAAGTGAACGCTGATCCGAAAGAACTGCGCTGCCAGCGCTGG 1444
QY 1485 GCAAGTGTCCCGGATTTATGTGATGAGCGTTACTGCGAATGCAATGCCACCCAGTTC 1544
Db 1445 GCAAGTGTCCCGGATTTATGTGATGAGCGTTACTGCGAATGCAATGCCACCCAGTTC 1504
QY 1545 AGCTGCAAAAACCAATTTGCAAGCCCTTCTGTGAGTGTGAGAGTGTCAAGTGT 1604
Db 1505 AGCTGCAAAAACCAATTTGCAAGCCCTTCTGTGAGTGTGAGAGTGTGTCAAGTGT 1564
QY 1605 GGGAGCAAGATGACGAGAGAGGCTGTGAGTGTCTGCTGCTGAGGATTTCAAGTGT 1664
Db 1565 GGGAGCAAGATGACGAGAGAGGCTGTGAGTGTCTGCTGCTGAGGATTTCAAGTGT 1624
QY 1665 GGGAGTGTCTCCCTCAGAGCCAGAAAGTGTAAAGGAGCAACTGTGAGATGAGTCT 1724
Db 1625 GGGAGTGTCTCCCTCAGAGCCAGAAAGTGTAAAGGAGCAACTGTGAGATGAGTCT 1684
QY 1725 GACGAGCTTCATGTGACAGCGTGAATGTCTTCTTGCACCAATATPACTTACGCTGC 1784
Db 1685 GACGAGCTTCATGTGACAGCGTGAATGTCTTCTTGCACCAATATPACTTACGCTGC 1744
QY 1785 CAAATGCTCTGTCTGTGACCAAGGCAACCTGAGTGTATGAGAGAGAGAGAGTGTAGC 1844
Db 1745 CAAATGCTCTGTCTGTGACCAAGGCAACCTGAGTGTATGAGAGAGAGAGAGTGTAGC 1804
QY 1845 GATGCTCCGATGAGAAACCTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 1904
Db 1805 GATGCTCCGATGAGAAACCTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 1864
QY 1905 GTGTGTGATGAGCAAGATGCGAGAGGCGAGTGTGCGTGTGAGTGTGAGTGTGAGTGT 1964
Db 1865 GTGTGTGATGAGCAAGATGCGAGAGGCGAGTGTGCGTGTGAGTGTGAGTGTGAGTGT 1924
QY 1965 CTGGGCAAGGCGCACTTGTGTGAGGCGCTGCTCAATCTCTGAGTGTGAGTGTGAG 2024
Db 1925 CTGGGCAAGGCGCACTTGTGTGAGGCGCTGCTCAATCTCTGAGTGTGAGTGTGAG 1984
QY 2025 GCTATGCTTTCAGAGATGACAAATTTCAAGTACTGACATACAGATGTGAGCGGCT 2084
Db 1985 GCTATGCTTTCAGAGATGACAAATTTCAAGTACTGACATACAGATGTGAGCGGCT 2044
QY 2085 TTCTGTGATGAGCAAGAGCAAGGCGAGTGTCTGTGAGTGTGAGTGTGAGTGTGAG 2144
Db 2045 TTCTGTGATGAGCAAGAGCAAGGCGAGTGTCTGTGAGTGTGAGTGTGAGTGTGAG 2104
QY 2145 AAACGATATCATCCACCTTCTCTCAATGATTTTCACTTGTGATGAGTGTGAGTGT 2204
Db 2105 AAACGATATCATCCACCTTCTCTCAATGATTTTCACTTGTGATGAGTGTGAGTGT 2164
QY 2205 CTGAGCTGAGAGAGTGGTGTGAGTGAAGCACTGTGAGGCGGCACTGTGCTGTGAT 2264
Db 2165 CTGAGCTGAGAGAGTGGTGTGAGTGAAGCACTGTGAGGCGGCACTGTGCTGTGAT 2224
QY 2265 GCTACCAATGTCTTCTGTGAGCAAGGCGAGTGTGAGTGTGAGTGTGAGTGTGAG 2324
Db 2225 GCTACCAATGTCTTCTGTGAGCAAGGCGAGTGTGAGTGTGAGTGTGAGTGTGAG 2284
QY 2325 GAGGAGGATCCGAGAGGCTGATTTCTGCAAGAGGAGTGTGAGTGTGAGTGTGAG 2384
Db 2285 GAGGAGGATCCGAGAGGCTGATTTCTGCAAGAGGAGTGTGAGTGTGAGTGTGAG 2344
QY 2385 AACTGAGAGCTTATGCGGAGAGATCAACCCAGATGATGTGTGTGTGTGTGTGT 2444
Db 2345 AACTGAGAGCTTATGCGGAGAGATCAACCCAGATGATGTGTGTGTGTGTGTGTGT 2404
QY 2445 AGT 2504
Db 2405 AGT 2464

QY 2505 GATGGGCGAATGTTCCAGGCTGTGTGAGCTGGGGTGAAGGCTGGCTCAGAGAAC 2564
 |||||
 Db 2465 GATGGGCGGATCTTCCAGGCGCGGTGTGTGAGCTGGGAGAGCGCTGGCTCAGAGAAC 2524
 |||||
 QY 2555 AAGCAGGCGGTGTACACAGGCTCCCTGTAGTTCGGGACTGATCAAGAGACACTGG 2624
 |||||
 Db 2525 AAGCAGGCGGTGTACACAGGCTCCCTGTAGTTCGGGACTGATCAAGAGACACTGG 2584
 |||||
 QY 2625 GTATAGCAGCTGTGACAGACAGCGGACCAAAACCCACAGGATGCGCCAGATGACCA 2684
 |||||
 Db 2585 GTATAGGCGCGGG---GCCACCAAAATGTGTACACCTGGCGGCGCACCATCTGTCACC 2641
 |||||
 QY 2685 CTTGAGATACAGAGAGAACTGACGACATTTATGCTGTGCGCTCCCGCCCAACACA 2744
 |||||
 Db 2642 CCAAGTGTGACAG-CCTGCAAGCTGAGACTGTGACCGGTGACTGTGACAGCGCC-CCAGA 2699
 |||||
 QY 2745 ACCCAGACTGTGAATCTGATCTCTTGAAGACTGAGAGT 2780
 |||||
 Db 2700 ACATACACTGTGAATCTCAATCTCCAGGGCTCCAAAT 2735
 |||||

RESULT 7

US-10-099-700A-1
 ; Sequence 1, Application US/10099700A
 ; Publication No. US2003008372A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Edwin L. Madison
 ; APPLICANT: Edgar O. Ong
 ; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING TRANSMEMBRANE SERINE PROTEASE 7,
 ; FILE REFERENCE: 24745-1613
 ; CURRENT APPLICATION NUMBER: US/10/099,700A
 ; PRIOR FILING DATE: 2002-05-24
 ; PRIOR APPLICATION NUMBER: 60/275,592
 ; NUMBER OF SEQ ID NOS: 22
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 1
 ; LENGTH: 3147
 ; TYPE: DNA
 ; ORGANISM: Homo Sapien
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (23)...(2589)
 ; OTHER INFORMATION: Nucleotide sequence encoding MTSp1
 ; PUBLICATION INFORMATION:
 ; AUTHORS: O'Brien, T.J. and Tanimoto, H.
 ; DATABASE ACCESSION NUMBER: GenBank #AB081724
 ; DATABASE ENTRY DATE: 2000-08-31
 ; PATENT DOCUMENT NUMBER: 5,972,616
 ; PATENT FILING DATE: 1998-02-20
 ; PUBLICATION DATE: 1999-10-26
 ; US-10-099-700A-1

Query Match 60.6%; Score 1883.2; DB 15; Length 3147;
 Best Local Similarity 81.2%; Pred. No. 0;

Matches 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3;

QY 45 GATGGACCGCCAAAACATGGGTAGCAATCGGGCGCCCAAGCGCGAGGGGGCTCTCAG 104
 |||||
 Db 5 GAGGGGCTCGGGGTACCATGGGAGCGATCGGGCCCGCAAGGGGGGGGGCCCGAAG 64
 |||||
 QY 105 GACTTCGGCGGGGAGCTCAATGACATCCCGGGCTAGAGAAACATGATGCTTTGAGAG 164
 |||||
 Db 65 GACTTCGGCGGGGAGCTCAATGACATCCCGGGCAGAGAAAGTGAATGGCTTGGAGGAA 124
 |||||
 QY 165 GGTGTGAGATCTGCTGTGCGAACAATGCAAGAAAGTGAAGAGCGAGGCCCGCAGGCGC 224
 |||||
 Db 125 GGGCGTGGAGTTCCTGCGCAGTCAACAGTCAAGAGGTGAGAAAGCATGGCGCGGGGCGC 184
 |||||
 QY 225 TGGGTGTGCTGTGCGAGTGTCTGTAGCTTCTCTTGTCTCTCCCTCATGAGCTTG 284
 |||||
 Db 185 TGGGTGTGCTGTGCGAGTGTCTGTAGCTTCTCTTGTCTTGTCTGTGGAGATGGCTTC 244
 |||||

QY 285 CTGCTGTGACATTCATATATCGGAATGTGGGGTTCAAAAAGTTTCAATGGCCATCTG 344
 |||||
 Db 245 CTGCTGTGACATTCATATATCGGAATGTGGGGTTCAAAAAGTTTCAATGGCCATCTG 304
 |||||
 QY 345 AGATTCACAAATGAGATCTTCTGATGCGATAGAACTCACTCCTCAGAGATTTATC 404
 |||||
 Db 305 AGATTCACAAATGAGATTTTGTGTATGCTTACAGAGAACTCACTCCTCAGAGATTTATC 364
 |||||
 QY 405 AGCTTGGCAGCGAGTGAAGAGAGCGCTGAAGTCTGTACAAATGAATGATCCCTGTCTG 464
 |||||
 Db 365 AGCTTGGCAGCGAGTGAAGAGAGCGCTGAAGTCTGTACAAATGATCCCTGTCTG 424
 |||||
 QY 465 GGTCCCTACCAAGAAAGTGGGCTGTAACTGCTTCACTGATGAGGCGAGTGTATGCTTAC 524
 |||||
 Db 425 GGGCCCTACCAAGAAAGTGGGCTGTAACTGCTTCACTGATGAGGCGAGTGTATGCTTAC 484
 |||||
 QY 525 TACTGTGAGATGTACATTCCTCCCACTGAGCAAGAGTGAATGCGGCAATGGCT 584
 |||||
 Db 485 TACTGTGAGATGTACATTCCTCCCACTGAGCAAGAGTGAATGCGGCAATGGCT 544
 |||||
 QY 585 GTGAGAGATGTGTAACTTGTCCACCCCGAGCAGCGGCACTGAATCTTGTGCTAACA 644
 |||||
 Db 545 GAGAGAGCGGTGTATGTCTGCTGCGCGCGCGCGCTCCTGAAGTCTTGTGTGCTACC 604
 |||||
 QY 645 TCTGTGTGCGCTTCCCAATGACCCCAAGATGCTGAGAGAGTCAAGAGCAAGCTGC 704
 |||||
 Db 605 TCAGTGTGTGCTTCCCAAGAGTCAAGAGAGTCAAGAGCAAGCTGC 664
 |||||
 QY 705 AGTTTGTGCTGTGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGT 764
 |||||
 Db 665 AGTTTGTGCTGTGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGT 724
 |||||
 QY 765 AACAGTCCCTACCGCGCGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTG 824
 |||||
 Db 725 GACAGCGCTTACCGCGCGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTG 784
 |||||
 QY 825 GTGCTGAGGCTCACTTCCGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGT 884
 |||||
 Db 785 GTGCTGAGGCTCACTTCCGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGT 844
 |||||
 QY 885 CTGTGACCGGTATGATGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAG 944
 |||||
 Db 845 CTGTGACCGGTATGATGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAG 904
 |||||
 QY 945 GGCACCTTGTACCTCTCTTCAACTGACTTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1004
 |||||
 Db 905 GGCACCTTGTACCTCTCTCTTCAACTGACTTCTCTCTCTCTCTCTCTCTCTCTCTCT 964
 |||||
 QY 1005 ACGTGTATACCAATGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGT 1064
 |||||
 Db 965 ACATGTATACCAATGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGT 1024
 |||||
 QY 1065 CCAAGATGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAG 1124
 |||||
 Db 1025 CCAAGATGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAG 1084
 |||||
 QY 1125 TACTATCCAGGCGACTACCGCGCCCAACTCACTGACATGAGATGATGAGTGTGAGAG 1184
 |||||
 Db 1085 TACTATCCAGGCGACTACCGCGCCCAACTCACTGACATGAGATGATGAGTGTGAGAG 1144
 |||||
 QY 1185 AACCGGAACTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGT 1244
 |||||
 Db 1145 AACCGGAACTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGT 1204
 |||||
 QY 1245 GGTCTTGTGACCAAGATGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAG 1304
 |||||
 Db 1205 GGTCTTGTGACCAAGATGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAG 1264
 |||||
 QY 1305 CAGTTTGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGT 1364
 |||||
 Db 1265 CAGTTTGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGTGAGAGTGT 1324
 |||||

QY 1365 TACAGGACACCGGGTTCTTACGTAGTACCTCTCTTACGACTCCACGACCGCTGGCCA 1424
 DB 1325 TACACCGACACCGGGTTCTTACGTAGTACCTCTCTTACGACTCCACGACCGCTGGCCA 1384
 QY 1425 GGGATGTTATGTGCAAGATCGGACGGTGCATCCGAAAGAACTGCGCTGCGACGCGCTG 1484
 DB 1385 GGGCATTTACATGCGCGACGCGGGCGGTATCCGAAAGAGGTGGCGCTGTATGCTGG 1444
 QY 1485 GCAGATCGCCGGATTATGATGATGAGCGTTACTGCGCATGATGACCAACCCACGATTC 1544
 DB 1445 GCCGATCGACCGACCGACGAGCGATGAGCTCACTGCAAGTTGCGACCGCGCCACGATTC 1504
 QY 1545 ACGTGCAGAAAACCAATTTCTGCAAGCCCTTTCTGGGTCTGTATACGTGTCAACGACTG 1604
 DB 1505 ACGTGCAGAAAACCAATTTCTGCAAGCCCTTTCTGGGTCTGTATACGTGTCAACGACTG 1564
 QY 1605 GGGGACGGAAGTACGACGAGGCGGTGCTGCTGCTGGAGTTCAAGTTCCTCAAT 1664
 DB 1565 GGGACACACGACGACGAGCGAGGTGCAATTTGTCGGCCGACGACCTTCAAGTTCCTCAAT 1624
 QY 1665 GGGAGATGCTCCCTCAGACCGCAAGTGTATGGAAGGACAACTGTGAGATGGGTCT 1724
 DB 1625 GGGAGATGCTCCCTCAGACCGCAAGTGTATGGAAGGACAACTGTGAGATGGGTCT 1684
 QY 1725 GACGAGGCTTATGTGACAGCGGTATGTGTCTCTTGCACCAATATACCTACCGCTGC 1784
 DB 1685 GACGAGGCTTATGTGACAGCGGTATGTGTCTCTTGCACCAATATACCTACCGCTGC 1744
 QY 1785 CAAAATGGCCCTCTGTGAGCAAGGACCACTGAGTGTGATGGAGAGCGACTGAGC 1844
 DB 1745 CTCAATGGCCCTCTGTGAGCAAGGACCACTGAGTGTGATGGAGAGCGACTGAGC 1804
 QY 1845 GATGAGCTCCGATGAGAAAACCTGTACTGTGGGCTGCGATCTTTTACCAACAGGCTGCG 1904
 DB 1805 GATGAGCTCCGATGAGAAAACCTGTACTGTGGGCTGCGATCTTTTACCAACAGGCTGCG 1864
 QY 1905 GTGTGTGTGTCAGATGCGGACGAGGCGGAGTGGCCCTGCGAGGTGAGCTCCAGCC 1964
 DB 1865 GTGTGTGTGTCAGATGCGGACGAGGCGGAGTGGCCCTGCGAGGTGAGCTCCAGCC 1924
 QY 1965 CTGGGCGACGGGCACTTGTGTGGGCTCGCTCATCTCTCTGACTGAGCTGGCTCTTGA 2024
 DB 1925 CTGGGCGACGGGCACTTGTGTGGGCTCGCTCATCTCTCTGACTGAGCTGGCTCTTGA 1984
 QY 2025 GCTCATGCTCTTACAGATGACAAAATTTCAAGTACTAGTACGATGATGAGCGGCC 2084
 DB 1985 GCAACCTGCTCATGATGATGAGAGATGATGATGATGATGATGATGATGATGATGATG 2044
 QY 2085 TTCTGTGGTCTGTGACGACGACGAAAGGCGCATGTGCGGGGTGACGAGCTGAAGCTC 2144
 DB 2045 TTCTGTGGTCTGTGACGACGACGAAAGGCGCATGTGCGGGGTGACGAGCTGAAGCTC 2104
 QY 2145 AAAGATATCATACCAACCTCTCTTCAATGATTTACCTTGCATGATGATGATGATGATG 2204
 DB 2105 AAAGATATCATACCAACCTCTCTTCAATGATTTACCTTGCATGATGATGATGATGATG 2164
 QY 2205 CTGAGCTGAGAGAGTGGGTGAGTACAGACCGTGTGTGCGCCCATCTGCTGTGCTGAT 2264
 DB 2165 CTGAGCTGAGAGAGTGGGTGAGTACAGACCGTGTGTGCGCCCATCTGCTGTGCTGAT 2224
 QY 2265 GCTACCCATGTTCTTCTCTGTGCAAGGCGCATGTGCGGTGACAGGCTGGGGGACACAAA 2324
 DB 2225 GCTACCCATGTTCTTCTCTGTGCAAGGCGCATGTGCGGTGACAGGCTGGGGGACACAAA 2284
 QY 2325 GAGGAGGATACGAGACGCTGATCTGCAAGAGGTGAGATCCGCTCATCAACGAGACC 2384
 DB 2285 TATGAGGATACGAGACGCTGATCTGCAAGAGGTGAGATCCGCTCATCAACGAGACC 2344
 QY 2385 ACGTGTGAGACCTCATGCGCGACGATGATCAACCGCAAGTATGTGTGTGGTTTCCCTC 2444
 DB 2345 ACGTGTGAGACCTCATGCGCGACGATGATCAACCGCAAGTATGTGTGTGGTTTCCCTC 2404
 QY 2445 AGTGGGGGTGTGATCTCTGCGAGGGTGAATCTGTGTGGCCCTTGTCAAGCGGAGAAA 2504

DB 2405 AGCGCGGGGTGATCTCTGCGAGGGTGTATCCGGGGACCCCTGTGACGCTGAGAGCG 2464
 QY 2505 GATGGCGCAATTTCCAGGCTGTGTGTGAGCTGGGCTGAAAGCTGCGCTCAAGAGAAC 2564
 DB 2465 GATGGCGCAATTTCCAGGCTGTGTGTGAGCTGGGCTGAAAGCTGCGCTCAAGAGAAC 2524
 QY 2565 AAGCCAGCGGTGACAAAGGCTCCCTGTATGTTGGGACTGTATCAAAAGACACTGGG 2624
 DB 2525 AAGCCAGCGGTGACAAAGGCTCCCTGTATGTTGGGACTGTATCAAAAGACACTGGG 2584
 QY 2625 GTATACAGATGACAGACAGCGCCACCAACACCGACAGGAGTCCCGCATGACACA 2684
 DB 2585 GTATACAGATGACAGACAGCGCCACCAACACCGACAGGAGTCCCGCATGACACC 2641
 QY 2685 CCGTATACAGAGAGAGAACACTGACATTTATGTGTGCGCTCCCGCCCAACACA 2744
 DB 2642 CCGTGTGACAG--CTGACAGGCTGAGAGCTGACACCGTGTGACTGACAGAGGCC--CCAGA 2699
 QY 2745 ACCCAGACTGTGAATGATCTCTTACGACTGAGAT 2780
 DB 2700 ACATACCTGTGAATCTCAAGGCTCCAAAT 2735

RESULT 8

US-10-099-700A-3

Sequence 3, Application US/10099700A

Publication No. US20030008372A1

GENERAL INFORMATION:

APPLICANT: Edwin L. Madison

APPLICANT: Edgar O. Ong

TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING TRANSMEMBRANE SERINE PROTEASE 7, 1

FILE REFERENCE: 24745-1613

CURRENT APPLICATION NUMBER: US/10/099, 700A

PRIOR FILING DATE: 2002-05-24

PRIOR FILING DATE: 2001-03-13

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 3

LENGTH: 3147

TYPE: DNA

ORGANISM: Homo Sapien

FEATURES:

NAME/KEY: CDS

LOCATION: (1865)..(2590)

OTHER INFORMATION: Nucleic acid sequence of protease domain of MTPS1

US-10-099-700A-3

Query Match 60.6%; Score 1883.2; DB 15; Length 3147;
 Best Local Similarity 81.2%; Pred. No. 0;

Matches 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3;

QY 45 GATGCGACCGCCAAAACCATGATGATGATGATGATGATGATGATGATGATGATGATGATG 104
 DB 5 GATGCGACCGCCAAAACCATGATGATGATGATGATGATGATGATGATGATGATGATGATG 64
 QY 105 GACTTCGGGCGGAGACTCAAGTACAACTCCCGCTAGAGAAATGATGATGATGATGATGATG 164
 DB 65 GACTTCGGGCGGAGACTCAAGTACAACTCCCGCTAGAGAAATGATGATGATGATGATGATG 124
 QY 165 GGTGTGAGTTCTCTGCTGCGAACAATGCGAAGAAAGTGAAGAGAGAGAGAGAGAGAGAG 224
 DB 125 GGTGTGAGTTCTCTGCTGCGAACAATGCGAAGAAAGTGAAGAGAGAGAGAGAGAGAGAG 184
 QY 225 TGGGT 284
 DB 185 TGGGT 244
 QY 285 CTGTGTGCACTTCAATATGGAATGTGCGGTTCAAAAGCTTTCAATGCGCATCTG 344
 DB 245 CTGTGTGCACTTCAATATGGAATGTGCGGTTCAAAAGCTTTCAATGCGCATCTG 304

QY 345 AGGATCACAAATAGAGATCTTTCTGGATGCGTATGAGAACTCCACTCCACAGATTATC 404
 Db 305 AGGATCACAAATAGAGATTTTGTGGATGCTACGAGAACTCCACTCCACAGATTATGTA 364
 QY 405 AGCTGCGCAGCCAGGTGAGAGAGCGCTGAAGCTGCTGTACAAATGAATCCCTGTCTTG 464
 Db 365 AGCTGCGCAGCAGAGTGAAGAGCGCGTGAAGCTGCTGTACAGCGAGTCCATTCTGTG 424
 QY 465 GGTCCCTTACCAAGAAAGTGGCTGTGAATCTGCTTCACTGAGAGGCGAGTGTATGCGCTAC 524
 Db 425 GGGCCCTTACCAAGAAAGTGGCTGTGAATCTGCTTCACTGAGAGGCGAGTGTATGCGCTAC 484
 QY 525 TACTGTGAGAGTTGAGATCCCGCCACACTGCGAGAGAGGTTGATCGCGCATGCT 584
 Db 485 TACTGTGAGAGTTGAGATCCCGCCACACTGCGAGAGAGGTTGATCGCGCATGCT 544
 QY 585 GTGAGAGGAGTTGTATGATTCACACCCGAGCAGGCGCATGAAATCCTTGTGCTTACA 644
 Db 545 GAGGAGGCGGTATGATGCTGCGCCCGCGCGCGCTCCCTGAAATCCTTGTGCTTACC 604
 QY 645 TCTGTGTGAGCTTCCCTCAATTGACCCCGAATGCTGAGAGACTCAGAGCAACAGCTGC 704
 Db 605 TCAGTGTGAGCTTCCCTCAAGAGCTCCAAACAGTACAGAGAGCCAGAGCAACAGCTGC 664
 QY 705 AGTTTGGCCCTGATGCGCATGAGTGAAGAGTGAAGAGTTCATCCTTGTGCTTACC 764
 Db 665 AGTTTGGCCCTGATGCGCATGAGTGAAGAGTGAAGAGTTCATCCTTGTGCTTACC 724
 QY 765 AACAGTCCCTTACCCGCGCAGTGCCTGCGAGTGGTCTGCGGAGGAGAGCGCGCATCTC 824
 Db 725 GACAGCGCCCTTACCCGCGCAGTGCCTGCGAGTGGTCTGCGGAGGAGAGCGCGCATCTC 784
 QY 825 GTGCTGAGGCTTACCTTCCGAGCTTGTATGCTGCTTGTGATGAGATGCGCATGAC 884
 Db 785 GTGCTGAGGCTTACCTTCCGAGCTTGTATGCTGCTTGTGATGAGATGCGCATGAC 844
 QY 885 CTGCTGAGGCTTATGATGAGTCCGAGGCGCATGAGAACTCCCAAGCTGTGCTGTGT 944
 Db 845 CTGCTGAGGCTTATGATGAGTCCGAGGCGCATGAGAACTCCCAAGCTGTGCTGTGT 904
 QY 945 GGCACCTTCTCACTCCCTTACAACTGATCTTCTCTCCAGAAAGCTTCTCTGTGC 1004
 Db 905 GGCACCTTCTCACTCCCTTACAACTGATCTTCTCTCCAGAAAGCTTCTCTGTGC 964
 QY 1005 ACGGTGATTAACCAATGATGAGCGCGCATCTGCTGCTTGTGAGCGCATTTCTTCCAGCTG 1064
 Db 965 ACGGTGATTAACCAATGATGAGCGCGCATCTGCTGCTTGTGAGCGCATTTCTTCCAGCTG 1024
 QY 1065 CCAAGATGAGAGCTGTGGGCGCTTTTGTGAGTGAACCCCAAGGAGCATTTGAGCGCTG 1124
 Db 1025 CCAAGATGAGAGCTGTGGGCGCTTTTGTGAGTGAACCCCAAGGAGCATTTGAGCGCTG 1084
 QY 1125 TACTATCCAGGCGCACTACCCGCGCAACATCACTGACATGGAATATCAAGGTGCGCAAC 1184
 Db 1085 TACTATCCAGGCGCACTACCCGCGCAACATGACATGGAATATCAAGGTGCGCAAC 1144
 QY 1185 AACCGGAACGTGAAAGTGGCTTCAACTTTCTATCTGTGAGACCCCAAGTACAGTGC 1244
 Db 1145 AACCGGAACGTGAAAGTGGCTTCAACTTTCTATCTGTGAGACCCCAAGTACAGTGC 1204
 QY 1245 GGCCTCTGCAACCAAGGATATGAGAGTCAACCGGAGGAGATGCTGCGGTGAGAGTGC 1304
 Db 1205 GGCACCTGCGCCCAAGGATATGAGAGTCAACCGGAGGAGATGCTGCGGTGAGAGTGC 1264
 QY 1305 CAGTTTGTGAGACGAGCAACAGCAGCAAGATTAACAGTCACTTCCATTTGATCACTCG 1364
 Db 1265 CAGTTTGTGAGACGAGCAACAGCAGCAAGATTAACAGTCACTTCCATTTGATCACTCG 1324
 QY 1365 TACACGAGCAACCGGCTTCTTGTGAGTGAATCTTCTTCAAGCTCAAGTACCATGCGCG 1424
 Db 1325 TACACGAGCAACCGGCTTCTTGTGAGTGAATCTTCTTCAAGCTCAAGTACCATGCGCG 1384

QY 1425 GGGAGTGTTCATGTGCAAGACTGAGACGGTGCATCCGAAGGAATCTGCGCTGCGACGCTGG 1484
 Db 1385 GGGAGTGTTCATGTGCAAGACTGAGACGGGCGGTGTATCCGAAGAGCTGCGCTGAGTGGCTGG 1444
 QY 1485 GCAAGCTGCGCGGATTAATGATGAGGTTACTGCGGATGCAATGCGCAACCAAGTTTC 1544
 Db 1445 GCGGATGCAACCGCAACAGGATGAGTCAACTGCAAGTTGCGAGCGCGCGCAACAGTTTC 1504
 QY 1545 ACGTGCAAAAAACAGTTTCTGCAAGCCCTTCTTGTGGGTGTGAGACAGTGTCAAGACTGT 1604
 Db 1505 ACGTGCAAAAAACAGTTTCTGCAAGCCCTTCTTGTGGGTGTGAGACAGTGTCAAGACTGT 1564
 QY 1605 GGGAGCGGAATGAGCAGAGAGGCGTGAAGCTGTCTCTGTGAGAGTTTCAAGTGTCAAT 1664
 Db 1565 GGGAGCGGAATGAGCAGAGAGGCGTGAAGCTGTCTCTGTGAGAGTTTCAAGTGTCAAT 1624
 QY 1665 GGGAGGTGTCTCTGCAAGCCAGAAAGTGAATGGAAGGCAACTGTGAGAGTGGTCT 1724
 Db 1625 GGGAGGTGTCTCTGCAAGCCAGCAAGTGAATGGAAGGCAACTGTGAGAGTGGTCT 1684
 QY 1725 GACGAGGCTTCAATGTGACAGCGTGAATGTGCTCTTGTGACCAAAATATACCTACCGCTGC 1784
 Db 1685 GACGAGGCTTCAATGTGACAGCGGCGCAAGTGAATGTGCTCTTGTGACCAAAATATACCGCTGC 1744
 QY 1785 CAAATGAGCTCTGTGAGCAAGGCGCAACCGGAGTGAATGGAAGAGAGCTGTAGC 1844
 Db 1745 CTAATGAGCTCTGTGAGCAAGGCGCAACCGGAGTGAATGGAAGAGAGCTGTAGC 1804
 QY 1845 GATGAGCTCCGATGAGAAAACTGTGACTGTGGGCTCGATCTCTTTTCCAAACAGGCTGCG 1904
 Db 1805 GACGAGCTCAGATGAGAAAGACTGCGACTGTGGGCTCGGCTCATTTCCAGAGACGCTGCT 1864
 QY 1905 GTGCTGTGTGAGCAAGAACTGCGACAGGCGAGTGGCCCTGCGAGGTGAGACCTTCCAGC 1964
 Db 1865 GTGCTGTGTGAGCAAGAACTGCGACAGGCGAGTGGCCCTGCGAGGTGAGACCTTCCAGC 1924
 QY 1965 CTGAGCGCAAGGCGCACTTGTGTGGGCGTGCATCTCTCTGAGCTGTGCTGTCTGTGA 2024
 Db 1925 CTGAGCGCAAGGCGCACTTGTGTGGGCGTGCATCTCTCTGAGCTGTGCTGTCTGTGA 1984
 QY 2025 GCTCATTTGCTTCAAGATGACAAAAATTTCAAGTACTCAGACTACACAGATGGAAGCGCC 2084
 Db 1985 GCACACTGCTACATGATGAGACAGAGGATTCAGTACTCAGACCCAGCAGAGTGAAGCGCC 2044
 QY 2085 TTCTGTGTGTGCTGAGACAGAGCGCAAGCGCAAGTGGCTCTGTGGGTGAGAGCTGAAGCTC 2144
 Db 2045 TTCTGTGTGTGCTGAGACAGAGCGCAAGCGCGCCCTGTGGGTGAGAGCGCAGGCTC 2104
 QY 2145 AAACGTATCATCACCACTCTCTCTTCAATGATTTCACTTGCATGATGAGCATTCGCTTGC 2204
 Db 2105 AAACGTATCATCACCACTCTCTCTTCAATGATTTCACTTGCATGATGAGCATTCGCTTGC 2164
 QY 2205 CTGAGCTGAGAAAGTGGTGAAGTGAAGCAACCGTGTGCGCCCATCTGCTGCGGAGC 2264
 Db 2165 CTGAGCTGAGAAAGTGGTGAAGTGAAGCAACCGTGTGCGCCCATCTGCTGCGGAGC 2224
 QY 2265 GCTACCAATGCTTCCCTGCTGCGCAAGCGCATCTGAGTCAAGGCTGAGGCGCAACAAA 2324
 Db 2225 GCTACCAATGCTTCCCTGCTGCGCAAGCGCATCTGAGTCAAGGCTGAGGCGCAACAAA 2284
 QY 2325 GAGGAGGTATCCGAGCGCTGATCTGTGAGAAAGGTTGAGTCCGTGATCAACCAAGCC 2384
 Db 2285 TATGAGAGCACTGCGCGCGCTGATCTGTGAGAAAGGTTGAGTCCGTGATCAACCAAGCC 2344
 QY 2385 ACGTGTGAGACTTCAATGTGCGCAGCAGATCAACCCCAAGAAATGATGTGTGAGGTTTCTC 2444
 Db 2345 ACGTGTGAGACTTCAATGTGCGCAGCAGCAGATCAACCCCGAGATGATGTGTGAGGTTTCTC 2404
 QY 2445 AGTGGGGGTGTGAGCTCTGCGCAGGCTGAGCTGTGTGAGGCTTGTGTAAGGCGGAGAGAA 2504
 Db 2405 AGGCGCGGCTGAGCTCTGCGCAGGCTGAGCTGTGTGAGGCTTGTGTAAGGCGGAGAG 2464
 QY 2505 GATGGGCGAATGTTCCAGGCTGTGTGTGAGCTGTGGGTGAAGGCTGCGCTCAGAGGAGC 2564

Db 2465 GATGGCGGATCTTCTCAGGCGGCTGTGTGAGCTGGGAGACGCGCTGGCTCAGAGAAC 2524
QY 2565 AAGCCAGGCGTGTACACAAAGGCTCCCTGTAGTTGGGACTGTGATCAAGAGACACTGGG 2624
Db 2525 AAGCCAGGCGTGTACACAAAGGCTCCCTGTAGTTGGGACTGTGATCAAGAGAACTGGG 2584
QY 2625 GTATAGCAGCATGACAGACAGCCGACCAAAACCCACAGGATGCCGACATGACAA 2684
Db 2585 GTATAGGCGCGCGG--GCCACCCCAATGTGTACCTCGGCGGCCACCCATGTCACCC 2641
QY 2685 CCTGTATACAGAGAGAGACACTGACGATTTATGCTGGCGTCCCGCCCAACACA 2744
Db 2642 CCAGGTGTGACG-CCTGCAGGCTGGAGACTGGACCGCTACATGCAACGAGGCC-CCAGA 2699
QY 2745 ACCGAGACTGTGAATGCACTGCTTGAAGACTCAGAGT 2780
Db 2700 ACATACACTGTGAATCACTATCTCCAGGGCTCCAAAT 2735

RESULT 9
US-10-190-030B-1
; Sequence 1, Application US/10190030B
; Publication No. US20030134238A1
; GENERAL INFORMATION:
; APPLICANT: Madison, Edwin
; APPLICANT: Ong, Edgar
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING A
; TITLE OF INVENTION: TRANSMEMBRANE SERINE PROTEASE 20, THE ENCODED POLYPEPTIDES AND
; TITLE OF INVENTION: METHODS BASED THEREON
; FILE REFERENCE: 24745-1618
; CURRENT APPLICATION NUMBER: US/10/190,030B
; CURRENT FILING DATE: 2002-07-03
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3147
; TYPE: DNA
; ORGANISM: Homo Sapien
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (23)...(2589)
; OTHER INFORMATION: Nucleotide sequence encoding MTRSP1
; PUBLICATION INFORMATION:
; AUTHORS: O'Brien, T.J. and Tanimoto, H.
; DATABASE ACCESSION NUMBER: Genbank #AF081724
; DATABASE ENTRY DATE: 2000-08-31
; PATENT DOCUMENT NUMBER: 5,972,616
; PATENT FILING DATE: 1998-02-20
; PUBLICATION DATE: 1999-10-26
; US-10-190-030B-1

Query Match 60.6%; Score 1883.2; DB 15; Length 3147;
Best Local Similarity 81.2%; Pred. No. 0;
Matches 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3;

QY 45 GATGAGCCGCCAAACCATGTGTGCAATCGGGGCCGAGAGCGGGGCTCTAG 104
Db 5 GAGCGGCTCGGGGTATCCATGTGGGAGCGATCGGCGCGGAGGGGAGGGGCCGGAAG 64
QY 105 GACTTCGGCGGGGACTCAAGTACAACTCCCGGCTAGAGACATGATGCTTTGAGAG 164
Db 65 GACTTCGGCGGGGACTCAAGTACAACTCCCGGCTAGAGAGATGATGCTTTGAGAG 124
QY 165 GGTGTGAGTTCTCTGCTTGGCAACATGCAAGAAAGTGGAGAGGAGGCGCCAGGCGC 224
Db 125 GCGGTGAGTTCTCTGCTTGGCAACATGCAAGAAAGTGGAGAGGAGGCGCCAGGCGC 184
QY 225 TGGGT 284
Db 185 TGGGT 244
QY 285 CTGGGT 344

Db 245 CTGTGTGTGCAATTTGCACTACCGGAGCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 304
QY 345 AGGATCAAAATAGATCTTTCTGTGATCGTATGAAATCTCCACTCCACAGATTATC 404
Db 305 AGGATCAAAATAGATCTTTCTGTGATCGTATGAAATCTCCACTCCACAGATTATC 364
QY 405 AGCTGTGCGCAGGAGTGAAGAGGCGCTGAAAGCTGTGTGTGTGTGTGTGTGTGTGTGTGT 464
Db 365 AGCTGTGCGCAGGAGTGAAGAGGCGCTGAAAGCTGTGTGTGTGTGTGTGTGTGTGTGTGT 424
QY 465 GGTCTCTTACAAAGAAAGT 524
Db 425 GGCCTCTTACAAAGAAAGT 484
QY 525 TACTGT 584
Db 485 TACTGT 544
QY 585 GTGAGCGAGTTGTAACTTTGCCACCCCGAGACAGGCGCACTGAATCTTGTGTGTGTGT 644
Db 545 GAGAGAGCGGT 604
QY 645 TCTGT 704
Db 605 TCAGT 664
QY 705 AGTTTGT 764
Db 665 AGCTTTGT 724
QY 765 AACAGTCTTACCCGCGGAGATGCGCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 824
Db 725 GACAGCGCTTACCCGCGGAGATGCGCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 784
QY 825 GT 884
Db 785 GT 844
QY 885 CTGT 944
Db 845 CTGT 904
QY 945 GGCACCTTTCACCTCTCTTACACCTGATCTTCTCTCTCTCTCTCTCTCTCTCTCTCT 1004
Db 905 GGCACCTTTCACCTCTCTTACACCTGATCTTCTCTCTCTCTCTCTCTCTCTCTCTCT 964
QY 1005 AACGTGTATACCAATCTGACCGGCGCATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1064
Db 965 AACGTGTATACCAATCTGACCGGCGCATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1024
QY 1065 CCAAGATGAGCAGT 1124
Db 1025 CCTAGATGAGCAGT 1084
QY 1125 TACTATCCAGGCGCACTTACCGGCGCAATCAATGCACTGAAATATAGGTGTCCAAAC 1184
Db 1085 TACTATCCAGGCGCACTTACCGGCGCAATCAATGCACTGAAATATAGGTGTCCAAAC 1144
QY 1185 AACCGGAATGGAAGT 1244
Db 1145 AACCGGAATGGAAGT 1204
QY 1245 GGTCTCTGTACCAAGACTATGTGAGATCAACGGGGAGAAATATGCGGGTGTAGAGTCC 1304
Db 1205 GGTCTCTGTACCAAGACTATGTGAGATCAACGGGGAGAAATATGCGGGTGTAGAGTCC 1264
QY 1305 CAGTTTGT 1364
Db 1265 CAGTTTGT 1324
QY 1365 TACAGGAGACCGGGTCTTGT 1424

Db 1325 TACACCGACACCGCTTCTTAGTGAATACCTCTCTACGACTCCAGTACCCATGCCCG 1384
 QY 1425 GGGATGTTTCATATGTCGCAAGACTGAGCGGTGATCCGAAAGAACTGCGGTGCGACGCGTGG 1484
 Db 1385 GGGAGATTTCAGTCCCGCACCGGGCGGGTGTATCCGAAAGAGCTGCCGTGTGATGGCTGG 1444
 QY 1485 GCACACTGCCCGGATTTAGTATGAGCGTTACTGCCGATGCAATGCCACCCACGATTC 1544
 Db 1445 GCCGACTGCAACCGACACAGGATGAGCTCAACTGCAAGTTGCGACGCCGCGCACGATTC 1504
 QY 1545 ACCTGCAAAAACAGTTCTGCAAGCCCTCTTCTGGGTCTGTGACATGTCAACGACTGT 1604
 Db 1505 ACCTGCAAAAACAGTTCTGCAAGCCCTCTTCTGGGTCTGTGACATGTCAACGACTGT 1564
 QY 1605 GGGAGCGGAAGTACACGAGAGGCGCTGCACTGTCTGCGAGATTTCAGATGTTCCAA 1664
 Db 1565 GGGAGCAACACGACGACGAGGCGGTGCAATTGCCGCCACGACCTTCAGGTGTTCCAA 1624
 QY 1665 GGGAGAGTGTCTCCCTGACGAGCGCAAGTGTATATGGAGAGACAACTGTGAGATGGGCT 1724
 Db 1625 GGGAGAGTGTCTCTGCAAAAACGACGATGCAATGGAGAGACAACTGTGAGATGGGCT 1684
 QY 1725 GACGAGGCTTCATGATGACGAGCGTGAATGTCTCTTGGACCAATATACCTACCGCTGC 1784
 Db 1685 GACGAGGCTCTCGCCCAAGGTGAACGTGTCTCTTGTATCCAAACACACTACCGCTGC 1744
 QY 1785 CAAAATGCGCTCTGTGTGACAAAGGCGCAACCTGAGTGTGATGGAGAGACGACTGTAGC 1844
 Db 1745 CTCGAATGGGCTCTGCTTGGAGCAAGGCGCAACCTGAGTGTGACGAGAGAGAGACTGTAGC 1804
 QY 1845 GATGCTCCGATGAGAAAACTGTGACTGTGGGTCTCGATCTTTTCCAAACAGGCTGCG 1904
 Db 1805 GACGGCTCATGATGAGAGAGACTGCGACTGTGGGTCTCGATCTTTTCCAAACAGAGCTGCT 1864
 QY 1905 GTGGTTGTGACAGAAATGCGACGAGCGAGCGAGTGGCGCTGCGAGGTGAGCTCCACGCG 1964
 Db 1865 GTTGTGGGGGACCGGATGCGGATGAGGCGAGTGGCGCTGCGAGGTGAGCTCCACGCG 1924
 QY 1965 CTGGGCGAGGCGCACTTGTGTGGGCGCTGCTCATCTCTCTGACTGTGCTGTCTGCA 2024
 Db 1925 CTGGGCGAGGCGCACTGTGCGGTCTTCTCATCTCTCCCACTGTGCTGTCTCTGCG 1984
 QY 2025 GCTCATGTGCTTCAAGATGACAAAATTTCAAGTACTCAGACTTACAGATGTGAGCGCG 2084
 Db 1985 GCACACTCTACATGATGACAGAGATTCAGATCTCAGACCCACGACGAGCGCGC 2044
 QY 2085 TTCTGGGTCTGCTGAGACGAGCAAGCGAGCTGCTCTGGGGGTGACAGAGCTGAAGTCT 2144
 Db 2045 TTCTGGGTCTGCTGAGACGAGCAAGCGAGCTGCTCTGGGGGTGACAGAGCTGAAGTCT 2104
 QY 2145 AAACGATCATACCCGACCTCTCTTCAATGATTTCACTTGCATATGATGATGATGATG 2204
 Db 2105 AAAGCATCATCTCCACCCCTCTTCAATGATTTCACTTGCATATGATGATGATGATG 2164
 QY 2205 CTGAGCTGAGAGAGTGGGTGAGAGACGACCGGTGCGCGCCCATCTGCTGTCTGAT 2264
 Db 2165 CTGAGCTGAGAGAAACCGGACAGATGACGCTCATGTGCGCGCCCATCTGCTGTCTGAT 2224
 QY 2265 GCTAACCATGTCTTCTGCTGAGAGCGCATCTGAGTCAAGGCTGGGGGACACAA 2324
 Db 2225 GCTTCCCATGTCTTCTGCTGAGAGCGCATCTGAGTCAAGGCTGGGGGACACAA 2284
 QY 2325 GAGGAGAGTACCGGAGCGCTGATCTTGCAGAAAGGTGAGATCGGTGATCAACCA 2384
 Db 2285 TATGAGAGCACTGGCGGCTGATCTTGCAGAAAGGTGAGATCGGTGATCAACCA 2344
 QY 2385 ACCTGTAGAGACCTCATGCGGACGACATGATGATGATGATGATGATGATGATGATG 2444
 Db 2345 ACCTGTAGAGACCTCTTCCGACGACGATGATGATGATGATGATGATGATGATGATG 2404
 QY 2445 AGTGGGGGTGTGACTCTTGTGAGAGGTGACTGTGAGGCGCTTGTCAAGCGCGAGAAA 2504
 Db 2405 AGCGGCGGCTGTGACTCTTGTGAGAGGTGATGATGATGATGATGATGATGATGATG 2464

QY 2505 GATGGGGAATGTTCCAGGCTGTGTGTGTGACTGTGGGTGAAGGCTGCTCAGAGAAC 2564
 Db 2465 GATGGGGAATCTTCCAGGCGCGGTGTGTGAGCTGGGGAACGGCTGCTCAGAGAAC 2524
 QY 2565 AAGCAGGCTGTACACAGAGCTCCCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2624
 Db 2525 AAGCAGGCTGTACACAGAGCTCCCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2584
 QY 2625 GTATGAGCATGTGACAGACGACGACCAACCAACCAAGGATCCCGACATGAC 2684
 Db 2585 GTATGAGGCGCGG---GCCACCAATGTGTACCTCGGGGCGACCATGTCTCAC 2644
 QY 2685 CCGATACAGAGAGAGAACTGACGACATTTATGTGTGTGTGTGTGTGTGTGTGTGT 2744
 Db 2642 CCAGTGTGACG---CTGACAGCTGTGAGACTGACCGCTGACTGACACGAGCGCC-CCAG 2699
 QY 2745 ACCGACCTGTGAACTGCATCTTGAAGACTCAAGT 2780
 Db 2700 ACATACATGTGAACTCAATCTTCAAGGCTCCAAAT 2735

RESULT 10
 US-10-190-030B-3
 ; Sequence 3, Application US/10190030B
 ; Publication No. US20030134298A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Medison, Edwin
 ; APPLICANT: Ong, Edgar
 ; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING A
 ; TITLE OF INVENTION: TRANSMEMBRANE SERINE PROTEASE 20, THE ENCODED POLYPEPTIDES AND
 ; FILE REFERENCE: 24745-1618
 ; CURRENT APPLICATION NUMBER: US/10/190,030B
 ; NUMBER OF SEQ ID NOS: 24
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 3147
 ; TYPE: DNA
 ; ORGANISM: Homo Sapien
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: (1865)...(2590)
 ; OTHER INFORMATION: Nucleic acid sequence of protease domain of MTSPI
 US-10-190-030B-3

Query Match 60.6%; Score 1883.2; DB 15; Length 3147;
 Best Local Similarity 81.2%; Pred. No. 0;
 Matches 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3;
 QY 45 GATGGAGCGCCAAACCATGGGTAGCAATGGGGCGGCAAGCGGAGGGGCTCTCAG 104
 Db 5 GAGGGGCTCCGGGTATCCATGGGAGCGATGGGCGCCGCAAGGCGAGGGGCGCCGAG 64
 QY 105 GACTTCGGCGGGGAGCTCAATCAATCTCCGCGCTAGAGAACTGATGCTTTGAGAG 164
 Db 65 GACTTCGGCGGGGAGCTCAATCAATCTCCGCGGACAGAGAAAGTATGCTTTGAGAGAA 124
 QY 165 GGTGTGAGTCTCTGCTGCGAACAATGSCAAGAAAGTGAGAGAGCGGACCAAGCGC 224
 Db 125 GCGGTGAGTTCCTGCGCAAGTCAACAGTCAAGAAAGTGAAGAAAGATGGCGGGCGC 184
 QY 225 TGGGTGTGCTGGTGGAGTGTGTTGAGCTTCTCTTGTCTCTCCATAGCTGAGCTTG 284
 Db 185 TGGGTGTGCTGGGAGCGCTGTGATCGGCTCTCTTGTGCTTGTGTGGGATGTGGCTTC 244
 QY 285 CTGGTGTGAGCACTTCAATTATGGAATGCGGGTTCAAAAAGTCTTCAATGCGCATGTG 344
 Db 245 CTGGTGTGAGCACTTCAATTATGGAATGCGGGAGTGTGTCCAGAAAGTCTTCAATGCTACATG 304
 QY 345 AGATCACAAAATGATCTTTCTGATGCTATGAGAACTCCACCTCCACAGATTTATC 404

Db 305 AGGATCACAAATGAGAAATTTTGTGATGCTACGAAACTCCAACTCCAGTGTGTA 364
QY 405 AGCCCTGGCCAGGCGAGTGAAGAGGCGCTGAAGCTGCTGTACATGAAGTCCCTGTCTG 464
Db 365 AGCCCTGGCCAGGCGAGTGAAGAGGCGCTGAAGCTGCTGTACAGGCGAGTCCCATTTCCG 424
QY 465 GGTCTCCATCACAAAGAGTGGCTGTAACTGGCTTCAAGTGAAGGCGAGTGTAAAGCTGAC 524
Db 425 GGGCCCTTACCAAGAGAGTGGCTGTGAAGGCGCTTCAAGGAGGCGAGTGTAAAGCTGAC 484
QY 525 TACTGTGTCAGAGTGCAGATCCCGCCACACTGGCGAGAGAGTGTATGATGCGCATGCT 584
Db 485 TACTGTGTCAGAGTGCAGATCCCGCCACACTGGCGAGAGTGTATGATGCGCATGCTGACC 544
QY 585 GTGAGAGGAGTGTAAATTTGCCACCCGAGACGCGGCACTGAAATCTCTTCTGTCTAA 644
Db 545 GAGGAGCGGAGTGTAAATTTGCCACCCGAGACGCGGCACTGAAATCTCTTCTGTCTAA 604
QY 645 TCTGTGTGCTCTTCCCGCATTTGACCCCAAGATGCTGACAGGACTGAGGACCAAGCTG 704
Db 605 TCAAGTGTGCTCTTCCCGCATTTGACCCCAAGATGCTGACAGGACTGAGGACCAAGCTG 664
QY 705 AGTTTGGCCCTGATGCGGCTGAGAGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT 764
Db 665 AGCTTTGGCCCTGATGCGGCTGAGAGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT 724
QY 765 AACAGTCCCTTACCCGCGATGCGGCTGAGAGAGTGAAGTGAAGTGAAGTGAAGTGAAGT 824
Db 725 GACAGGCGCTTACCCGCGATGCGGCTGAGAGAGTGAAGTGAAGTGAAGTGAAGTGAAGT 784
QY 825 GTGTGAGCTTACCTTCCGAAAGCTTGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 884
Db 785 GTGTGAGCTTACCTTCCGAAAGCTTGTATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 844
QY 885 CTGTGTCACGCTGTATGATGCTGAGGCGGCAATGAGAACCCCAAGCTGTGTGTGTGTGT 944
Db 845 CTGTGTCACGCTGTATGATGCTGAGGCGGCAATGAGAACCCCAAGCTGTGTGTGTGTGT 904
QY 945 GGCACCTTCTACCCCTCTTACACCTGACTTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1004
Db 905 GGCACCTTACCCCTCTTCTTCAACCTGACTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 964
QY 1005 AGCTGTATTAACCAATCTGACCGGCGAATCTGCTGCTTGAAGGCACTTCTCTCAAGT 1064
Db 965 ACCTGTATTAACCAATCTGACCGGCGAATCTGCTGCTTGAAGGCACTTCTCTCAAGT 1024
QY 1065 CCCAAGATGAGCAGCTGTGTGCGGCTTTTGTGATGACACCCAAAGGACATTTAGACGCCC 1124
Db 1025 CCTAGATGAGCAGCTGTGTGCGGCTTTTGTGATGACACCCAAAGGACATTTAGACGCCC 1084
QY 1125 TACTATCCAGGCACTTACCCGCGCAATCAATGACATGGAATATCAAGTGTGCCAAC 1184
Db 1085 TACTATCCAGGCACTTACCCGCGCAATGACATGGAATATCAAGTGTGCCAAC 1144
QY 1185 AACCGGAACGTGAAGTGTGCGCTTCAAACTCTTCTATCTGTGTGACCCCAACGTTACAGT 1244
Db 1145 AACCGGAACGTGAAGTGTGCGCTTCAAACTCTTCTATCTGTGTGACCCCAACGTTACAGT 1204
QY 1245 GGCCTCTGCAACCAAGACTATGTGAATCAACGCGGAGAACTACTGCGGTGAGAGTTC 1304
Db 1205 GGCACCTGCGCCCAAGGACTAGTGAATCAATGCGGAGAAATATCTGCGGAGAGAGTTC 1264
QY 1305 CAGTTGTGTGAGGACGACAGCAGCAAGCAATCAAGTGTGCTTCACTCAAGTCAATCTC 1324
Db 1265 CAGTTGTGTGAGGACGACAGCAGCAATCAAGTGTGCTTCACTCAAGTCAATCTC 1324
QY 1365 TACAGGAGAACCGGCTTCTAGTGTGCTCTCTCTCAAGTCAAGTCAAGTCAAGTCAAGT 1424
Db 1325 TACAGGAGAACCGGCTTCTAGTGTGCTCTCTCTCAAGTCAAGTCAAGTCAAGTCAAGT 1384
QY 1425 GGGATTTATGATGACAGACTGACGCTGATCCGAAGGAACTGCGCTGCGACGCTGTG 1484
Db 1385 GGGATTTATGATGACAGACTGACGCTGATCCGAAGGAACTGCGCTGCGACGCTGTG 1444

QY 1485 GCAGACTCCCGGATTAATGATGATGAGGCTTACTGCCAATGCAATGCCAATGCCAATGCC 1544
Db 1445 GCCGATCCACCGAACCAAGGAGTATGCTCAACTGATGAGTGGAGCGCGCCGACCAAGTTC 1504
QY 1545 ACCTGCAAAAACCAATTTCTGCAAGCCCTCTCTGAGTGTGACAGTGTCAACAGCTGT 1604
Db 1505 ACCTGCAAAAACCAATTTCTGCAAGCCCTCTCTGAGTGTGACAGTGTGTGAACAGCTGT 1564
QY 1605 GGGAGCGAAGTGAAGAGAGGAGGCTGACAGTGTCTGCTGAGGAGTTCAAGTGTTCAT 1664
Db 1565 GAGAGCAACAGGAGAGAGAGGAGTGTGATGCTGCGGCCAAGCTTCAAGTGTTCAT 1624
QY 1665 GGGAGTGTCTCTCTGAGGAGGAGGAGTGTGATGCTGCGGCCAAGCTTCAAGTGTTCAT 1724
Db 1625 GGGAGTGTCTCTCTGAGGAGGAGGAGTGTGATGCTGCGGCCAAGCTTCAAGTGTTCAT 1684
QY 1725 GACGAGGCTTCAATGAGAGGAGGAGTGTGATGCTGCGGCCAAGCTTCAAGTGTTCAT 1784
Db 1685 GACGAGGCTTCTGCGCCCAAGGAGTGTGATGCTGCGGCCAAGCTTCAAGTGTTCAT 1744
QY 1785 CAAAATGAGCTCTGCTGAGCAAGGAGGAGGAGGAGTGTGATGAGGAGGAGGAGGAGG 1844
Db 1745 CTCAATGAGGCTCTGCTTGAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1804
QY 1845 GATGAGCTCGAGTGAAGAACTGTGACTGTGAGGCTGCACTTCTCAACAGGCTGCG 1904
Db 1805 GACGAGCTGATGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1864
QY 1905 GT 1964
Db 1865 GT 1924
QY 1965 CTGGGCGAGGCGCACTTGT 2024
Db 1925 CTGGGCGAGGCGCAATCTGCGGTGCTTCTCTCAATCTGCTGCTGCTGCTGCTGCTGCT 1984
QY 2025 GCTCATGCTTTTCAAGATGACAAATTTTCAAGTCTCAAGTCTCAAGTCTCAAGTCTCA 2084
Db 1985 GCAACATGCTTACATGATGACAGAGATGACAGATGACAGATGACAGATGACAGATGAC 2044
QY 2085 TTCTGT 2144
Db 2045 TTCTGT 2104
QY 2145 AAAGTATATCAACCACTTCTCTTCAATGATTTCACTTCTGATATGATGATGATGATG 2204
Db 2105 AAAGTATATCACTTCTCTTCAATGATTTCACTTCTGATATGATGATGATGATGATG 2164
QY 2205 CTGAGCTGTGAAGT 2264
Db 2165 CTGAGCTGTGAAGT 2224
QY 2265 GCTTCCATGCTTCTCTGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2284
Db 2225 GCTTCCATGCTTCTCTGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2284
QY 2325 GAGGAGGATACCGAGGCTGATCTCTGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2384
Db 2285 TATGAGGAGCATGAGGCTGATCTTCAAAAAGGAGTGAATCTGAGTATCAACAGAGAC 2344
QY 2385 ACCTGTGAGAGCTTCAATGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2444
Db 2345 ACCTGTGAGAGCTTCTGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2404
QY 2445 AGTGGGAGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 2504
Db 2405 AGCGGAGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 2464
QY 2505 GATGAGGAGATGTTCAGGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2564
Db 2465 GATGAGGAGATGTTCAGGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2524

QY	2565	AAGCAGGCGGTTACACAAAGGCTCCCTCTAGTTGGGACTGATCAAGACACACTGGG	2624
Db	2555	AAGCCAGGCGGTTACACAAAGGCTCCCTCTGTTTGGGACTGATCAAGACACACTGGG	2584
QY	2625	GTATAGCAGCATGGACAGACAGCGGACGACCAAAACACCCACAGGGATGCCCGCACTGCACA	2684
Db	2585	GTATAGGGGCGCGGG---GCCACCCAAATGTGTAACCTCGCGGGCGACCCATGTGCCACC	2641
QY	2685	CTTGGGATACAGGAAGGAACTGACGACATTTATGCTGTGGCCCTCCCGCCCCCAACACA	2744
Db	2642	CCAATGTGCAAG-CCTGCAGGCTGTGAAGCTGGAACCGCTGACTGCACCGAGGCC-CCAGA	2699
QY	2745	ACCAGACTGTGAACCTGCATCTTAGACTAGAGT	2780
Db	2700	ACATACCTGTGAACCTCAATCTCCAGGAGCTTCAAT	2735

```

RESULT 11
US-10-302-840A-1
; Sequence 1, Application US/10302840A
; Publication No. US20030134794A1
; GENERAL INFORMATION:
; APPLICANT: Madison, Edwin L.
; APPLICANT: Ong, Edgar O.
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING SERINE PROTEASE CVP17, THE ENCO
; TITLE OF INVENTION: POLYPEPTIDES AND METHODS BASED THEREON
; FILE REFERENCE: 24745-1622
; CURRENT APPLICATION NUMBER: US/10/302,840A
; PRIOR APPLICATION NUMBER: 60/332,015
; PRIOR FILING DATE: 2001-11-20
; NUMBER OF SEQ ID NOS: 18
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3147
; TYPE: DNA
; ORGANISM: Homo Sapien
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (23)...(2589)
; OTHER INFORMATION: Nucleotide sequence encoding WMSPI
; PUBLICATION INFORMATION:
; DATABASE ACCESSION NUMBER: GenBank #AB081724
; DATABASE ENTRY DATE: 2000-08-31
;
US-10-302-840A-1

```

Query Match	60.6%	Score 1883.2	DB 15	Length 3147
Best Local Similarity	81.2%	Pred. NO. 0		
Matches 2223; Conservative	0	Mismatches 508	Indels 5	Gaps 3

v7	43	GAACTGACATCCAAAAACCATTGGGTATCAATTCGGGGCGCGAAGGCCCGAGAAGGGGACTCTCAG	104
Db	5	GAGCGGCCTCGGGGTATACCATGGGGAGCGATTCGGGCCCGCAAGGGCGGAAGGGGCCCGGAG	64
QY	105	GACTTCGGCGCGGAGCTCAAGTACAATCCCGGCTTAGAATACTGAATGGCTTTGAGAG	164
Db	65	GACTTCGGCGCGGAGCTCAAGTACAATCCCGGCGACGAAPAAAGTGATATGCTTTGAGGAGA	124
QY	165	GGTGTGAGTTCTCTCCTTCGGAACAATGCCAAGAAAAGTGGAGAGGAGAGCCCAAGCGC	224
Db	125	GCGGTGAGTTCTCTCGCACATCAACGTCAGAAGAGTGAAMAGATGGCCCCGGGGCCC	184
QY	225	TGGTGGGAGCTGGTGGGAGATGCTGTCAAGCTTCCTCTTCTCTCATGGCTGGCTTG	284
Db	185	TGGTGGGAGCTGGGAGAGCCGTGTATCGAGCTTCCTCTTGTGTCTTGTGGGAGTCGGCTTC	244
QY	285	CTGGTGGGCACTTCCATTATCGAATGTGGCGGTTCAAAAAGTTCATATGAGCATCTG	344
Db	245	CTGGTGGGCACTTTCAGTACCGGAGCGGTGTCAGAAAGTCTTCAAATGGCTAACAG	304
QY	345	AGGATCACAATAGAGATCTTTCTGGATGCGTATGAGAACTCCACTCCACAGAGTTTATC	404
Db	305	AGGATCACAATAGAGATTTTGTGGATGCTACGGAATCTCCAACTCCACTAAGTTTGA	364

QY	405	AGCCTGGCCACCGAGGTGAAGAGGGGCTTAACGTGTGTACATGAAAGTCCCTGTCTG	464
Db	365	AGCCTGGCCACCGAGGTGAAGAGGGGCTTAACGTGTGTACATGAAAGTCCCTGTCTG	424
QY	465	GGTCCCTACCAAGAAGTGGGTGTAACTGCTTGTAGTGAAGGGGAGCTGTCAATCCGCTAC	524
Db	425	GGCCCTTACCAAGAAGTGGGTGTAACTGCTTGTAGTGAAGGGGAGCTGTCAATCCGCTAC	484
QY	525	TACTGTGACAGTTCAAGATCCCCCAACCTTGGCAGAAAGAGGTTATCGCGCATGGCT	584
Db	485	TACTGTGACAGTTCAAGATCCCCCAACCTTGTGAGAGAGGCCAGCGCTCATGGCC	544
QY	585	GTGGAGCGAGTTTAACTATTECCACCCCGAGACCGGACCTGAATCTTGTGTACAA	644
Db	545	GAGGAGCGGAGTACTGTGCTGCCCCCGGGGCGCTCTCCTGAAGTCTTGTGTACAC	604
QY	645	TCGTGTGTGGCTTCCCAATTGACCCCAATGCTGTCAAGATCTTAGACAACTAGTGC	704
Db	605	TCAGTGTGTGCTTCCCAAGGCTTCAAAACAGTACAGAGACCCAGAGCAACAGCTGC	664
QY	705	AGTTTGGCCCTGATGCCCATGATGACAGTGAACAGCTTCACTACCCCTGGCTTCCGC	764
Db	665	AGCTTTGGCTGTACGCCCGCGGTGTGAGCTGTATGCTTCAACAGCCGCGCTTCCCT	724
QY	765	AACAGTCCCTTACCCGCGCATGCGCGCTTCCAGTGGGTCTTGGGGGGACGCGCATCT	824
Db	725	GACAGTCCCTTACCCGCTCATGCGCTGCAGTGGGCTCTCGGGGGACGCGCATCTA	784
QY	825	GTGTGAGGCTCAACCTTCCGAAGCTTTGATGTGCTCCCTGTGATGAGATGGCACTGAC	884
Db	785	GTGTGAGGCTCAACCTTCCGACGTTTGACTTGGTCTTGGGAGAGAGCGGACGCGAC	844
QY	885	CTGTGTACCGGTATGATGACTTGACCCCATGAACCCCAAGCTGTGTGCGGCTGTGT	944
Db	845	CTGTGTACCGGTATGATGACCCCTGAGCCCATGAGAGCCCAAGCGCTGTGTGTGTGT	904
QY	945	GGCACCCTTCTACCCCTCTCTCAACCTGACTTCTCTCCAGAAAGTCTTCTCTGTCT	1004
Db	905	GGCACCCTTACCCCTCTCTCAACCTGACTTCTCTCCAGAAAGTCTTCTCTGTCT	964
QY	1005	AAGCTGATTAACCAATGTAACCGGAGATCTGTGCTTTGAGGCCACTTTCCTCAAGCTG	1064
Db	965	AACCTGATTAACCAATGTAACCGGAGATCTGTGCTTTGAGGCCACTTTCCTCAAGCTG	1024
QY	1065	CCCAAGATGAGAGCTGTGTGGGCTTTTGTAGTGAACCCAAAGGACATTTAAGACGCC	1124
Db	1025	CCAGAGATGAGAGCTGTGTGGGCGCGCTTACTGTAAAGCCAGGGGACATTCAAGGCC	1084
QY	1125	TACTATCCAGGCACTATCCGCCCAACATCAATGCACTATGAAATATCAAGGTGCCAAC	1184
Db	1085	TACTATCCAGGCACTATCCGCCCAACATGACTGACATGAAATATTGAAGTGCCAAC	1144
QY	1185	AACCGGAACGGAAGGTGCGCTTAAACTCTTCTATCTGTGTGACCCCAACGTACCACTG	1244
Db	1145	AACCGAGATGGAAGGTGAGCTTAAATCTTCTTACCTGTGTGAGCCCGGCTGCTGCG	1204
QY	1245	GGCTCTGCAACCAAGACTATGTGAGATCAACCGGAGAAAGTCTGTGGTGAAGAGTCC	1304
Db	1205	GGCACTGTGCCCAAGAGACTAGTGTGAATCAATGGGAGAAATATCTGTGGAGAAAGTCC	1264
QY	1305	CAGTTTGTGTGACAGCAACGACGAGCAAGATTACAGTCCACTTCCATTGTGATCACTCG	1364
Db	1265	CAGTTGTGTGTGACCAACCAACAGCAACAGATCAAGTGTGCTTCCACTAGATCAATCC	1324
QY	1365	TACACGGAACACCGGCTTCTAGCTGAGTACTCTCTCTACGATCTCAACGACCCGTGCCA	1424
Db	1325	TACACGCAACCGGCTTCTTAGCTGAATACCTCTCTACACATCTCCAGTGAACCATGCGCG	1384
QY	1425	GGGATGTTTCAATGTGCAAGCTGACGGGTGATCGGAAGAACTGGCGCTGCGACGGCTGG	1484
Db	1385	GGGAGTTTCAAGTGTGCCCAACGGGCGGTGTATCTCGGAGGAGAGCTGCGCTGTGATGGCTGG	1444

QY 1485 GCGAGCTCCCGGATTTATGATGAGCTTACTCGCATGCAATGCCACCCACGAGTTC 1544
 DB 1445 GCCGACTCACCGACGACAGCGATGATCACTGAGTGGAGCGCGGCCACGATTC 1504
 QY 1545 ACGTCAAAACCAATTTGCAAGCCCTCTCTGAGGCTGTGAGAGTGTCAACGACTGT 1604
 DB 1505 ACGTCAAAACCAATTTGCAAGCCCTCTCTGAGGCTGTGAGAGTGTCAACGACTGT 1564
 QY 1605 GGGGACGGAAGTGAAGAGAGAGGCTGAGCTGTCTGCTGGAGATTTCAGTGTTCAT 1664
 DB 1565 GGAAGCAACAGCGAGAGAGAGGCTGAGCTGTCTGCTGGAGATTTCAGTGTTCAT 1624
 QY 1665 GGGAAATGTCTCCCTCAGAGCCAGAGTGTATGGGAGAGAACCTGTGAGATGGGCT 1724
 DB 1625 GGGAAATGTCTCCCTCAGAGCCAGAGTGTATGGGAGAGAACCTGTGAGATGGGCT 1684
 QY 1725 GACGAGGCTTCATGTCAGAGCTGATGTCGTCTTGGACCAATATATCTACGCTGC 1784
 DB 1685 GACGAGGCTTCCTGCCCCAAGGTGAAGTGTCTCATTTGATCCAAACACACCTACCGCTGC 1744
 QY 1785 CAAATAGGCTCTGTGTGAGCAAGGCGAACCTCTGATGTGATGGAGAGAGCTGTAGC 1844
 DB 1745 CTCATAGGCTCTGTGTGAGCAAGGCGAACCTCTGATGTGATGGAGAGAGCTGTAGC 1804
 QY 1845 GATGCTCCGATGAGAAAACCTGTGATGCTGAGCTGTGATCTTTACAAACAGGCTGC 1904
 DB 1805 GACGGCTCAGATGAGAGAGCTGAGCTGTGAGCTGTGATCTTTACAAACAGGCTGC 1864
 QY 1905 GTGGTGTGTCAGAGATGCGAGAGGCGAGTGGCCCTGAGAGTGAAGCTTCCAGCC 1964
 DB 1865 GTTGTGTGTCAGAGATGCGAGAGGCGAGTGGCCCTGAGAGTGAAGCTTCCAGCT 1924
 QY 1965 CTGGGCGCAGGCGCACTTGTGTGGGCTCGCTCATCTCTCTGATGGCTGTCTTGA 2024
 DB 1925 CTGGGCGCAGGCGCACTTGTGTGGGCTCGCTCATCTCTCTGATGGCTGTCTTGA 1984
 QY 2025 GCTCATGTCTTTCAGATGAGCAAAATTTGCAAGTCTCAGACTACGATGAGAGGCG 2084
 DB 1985 GCAACACTGTCATCATGATGACAGAGGATTCAGTACTCAGACCCACGAGTGAAGGCG 2044
 QY 2085 TTCTGTGGCTGTGTGAGCAAGAGCAGAGCTCTGTGGGCTGAGAGCTGAAGCTC 2144
 DB 2045 TTCTGTGGCTGTGTGAGCAAGAGCAGAGCTCTGTGGGCTGAGAGCTGAAGCTC 2104
 QY 2145 AAAGTATCATGATCCACCTCTTCTTAATGATTTACCTTCACTATGACATGAGCTGT 2204
 DB 2105 AAAGTATCATGATCCACCTCTTCTTAATGATTTACCTTCACTATGACATGAGCTGT 2164
 QY 2205 CTGAGAGCTGAGAGAGTGTGTGAGATGACAGACCGTGTGGGCGCCCATCTGCTCTGAT 2264
 DB 2165 CTGAGAGCTGAGAGAGTGTGTGAGATGACAGACCGTGTGGGCGCCCATCTGCTCTGAT 2224
 QY 2265 GCTAACCATGCTCTTCTGCTGTGAGAGGCACTTGGGCTGACAGGCTGGGGCGACAAA 2324
 DB 2225 GCTAACCATGCTCTTCTGCTGTGAGAGGCACTTGGGCTGACAGGCTGGGGCGACAAA 2284
 QY 2325 GAGGAGGTACCGAGAGCTGTCTCTGAGAGAGGTGAGATCCGTGTATCAACGAGAC 2384
 DB 2285 TATGAGGACACTGGGCGCTGTATCTTGCAAAAGGTGAGATCCGTGTATCAACGAGAC 2344
 QY 2385 AACTGTGAGAGCTGATGCGGAGAGATCACTCCAGCAATGATGTGTGGGTTCTC 2444
 DB 2345 AACTGTGAGAGCTGATGCGGAGAGATCACTCCAGCAATGATGTGTGGGTTCTC 2404
 QY 2445 AGTGGGAGTGTGAGCTCTGCGAGAGGTGACTGTGTGGCCCTTGTCAAGCGCGAGAAA 2504
 DB 2405 AGCGGCGGTGTGAGCTCTGCGAGAGGTGACTGTGTGGCCCTTGTCAAGCGCGAGG 2464
 QY 2505 GATGGGCAATTTTCCAGGCTGTGTGTGAGTGTGGGTGAGAGGCTGTGTGAGAGAAC 2564
 DB 2465 GATGGGCGGATTTTCCAGGCTGTGTGTGAGTGTGGGTGAGAGGCTGTGTGAGAGAAC 2524
 QY 2565 AAGCCAGGCTGTACAGAGGCTCCTGTGATGTGGGACTGGATCAAGAGCACTGGG 2624

DB 2525 AAGCGGCGGTGTACAGAGGCTCCTGTGTGGGACTGTATPAAAGAGAACCTGGG 2584
 QY 2625 GTATGAGCATGTGACAGACAGCCGACCAAAACACCAAGGATGCCCCGATGACA 2684
 DB 2585 GTATGAGCGCGGG--GCCACCAAAATGTATACACTGGGGGCGACCCATGCTCAC 2641
 QY 2685 CCGATACAGAGAGAGAACTGACGACATTATGTGTGGCTTCCCCCCCCAACACA 2744
 DB 2642 CCAAGTGTAGG--CTGACAGGCTGTGAGACTGAGACCGCTGACTGTACACAGGCGCC--CCAGA 2699
 QY 2745 ACCGACTGTGATCTGATCCTTGGACTCAGAT 2780
 DB 2700 ACATACACTGTGAACCTCAATTCACAGGCTCCAAAT 2735

 RESULT 12
 US-10-302-840A-3
 ; Sequence 3, Application US/10302840A
 ; Publication No. US20030134794A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Madison, Edwin L.
 ; APPLICANT: Ong, Edgar O.
 ; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING SERINE PROTEASE CWPSP17, THE ENCODING
 ; FILE REFERENCE: 24745-1622
 ; CURRENT APPLICATION NUMBER: US/10/302,840A
 ; CURRENT FILING DATE: 2003-01-24
 ; PRIOR APPLICATION NUMBER: 60/332,015
 ; PRIOR FILING DATE: 2001-11-20
 ; NUMBER OF SEQ ID NOS: 18
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 3
 ; LENGTH: 3147
 ; TYPE: DNA
 ; ORGANISM: Homo Sapien
 ; FEATURES:
 ; NAME/KEY: CDS
 ; LOCATION: (1865)...(2590)
 ; OTHER INFORMATION: Nucleic acid sequence of protease domain of MTSPL
 US-10-302-840A-3

 Query Match 60.6%; Score 1883.2; DB 15; Length 3147;
 Best Local Similarity 81.2%; Pred. No. 0;
 Matches 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3;

 QY 45 GATGGACCGGCAAAACCATGAGTGAAGATGAGGCGCGAAGGCGGAGGCTTCAG 104
 DB 5 GAGCGGCTGTGGGATCAATGAGGAGCGATGCGGCCCGCAAGGCGGAGGCCGAG 64
 QY 105 GACTTGGCGCGGAGCTCAAGTACACTCCCGCTAGAGAACATGATGCTTTGAGAG 164
 DB 65 GACTTGGCGCGGAGCTCAAGTACACTCCCGCGACGAGAAAGTGAATGAGCTTGAAG 124
 QY 165 GGTGTGAGTTCCTGCGCTGCGAACAATGCCAAGAAAGTGAAGAGCGAGCGCCAG 224
 DB 125 GCGGTGAGTTCCTGCGCACTCAACAGCTCAAGAAAGTGAAGAGCAAGCGCGGCGC 184
 QY 225 TGGGTGTGTGTGAGGAGCTGTTCAGCTTCTCTTGTCTCTCTCTCATGAGCTGTG 284
 DB 185 TGGGTGTGTGTGAGGAGCTGTTCAGCTTCTCTTGTCTCTCTCTCATGAGCTGTG 244
 QY 285 CTGTGTGAGCACTTCATTATTCGAAATGTGGGCTTCAAAAAGTCTCAATGGCCATG 344
 DB 245 CTGTGTGAGCACTTCATTATTCGAAATGTGGGCTTCAAAAAGTCTCAATGGCCATG 304
 QY 345 AGATACAAATGAGATCTTTCTGATGCGTATGAGAACTCACTCAAGATTATC 404
 DB 305 AGATACAAATGAGATTTTGTGATGCTTACGAGAACTCACTCAAGATTATC 364
 QY 405 ACCCTGGCGAGCGAGTGAAGAGCGCTGAAGCTGTCTGTACAAATGAGTCTCTGTCTG 464
 DB 365 ACCCTGGCGAGAGTGAAGAGCGCGTGAAGCTGTCTGTACAGCGAGTCTCATCTCTG 424

Qy	465	GGTCCCTAACCA	CAGAAGTCGGCTGTAA	CTGCCTTCAGTGA	GGGCACTGTATCGCTTAC	524	
Db	425	GGCCCTTACCA	CAAGAGATCGGCTGTGA	CGGCTTTCAGCGAGGGCA	CGTATCGCTTAC	484	
Qy	525	TACTGTGTCAG	GTTCAGATCCCCCA	CACTGTGCAGAA	AGTTGATCGCGCCATGCTT	584	
Db	485	TACTGTGTCAG	TTTCAGATCCCGCA	CACCTGTGTGA	AGAGCGCGCATATGCTTAC	544	
Qy	585	GTGAGCGAG	TGTGTAACTTGCAC	CCCCGAGCA	GGGCACTGTAA	TCCTTCGTGTAA	644
Db	545	GAGGAGCGG	ATGATCATGTGCTCC	CGCGGGCGCTCT	CTGTAAATCTTGTGTAC	604	
Qy	645	TCGTGTGAC	CTTCCCCATTGA	CCCCGAAATCTG	AGAGACTAGACA	CAGCTGC	704
Db	605	TCATGTGTG	CTTCCCCAGCA	CTCCAAACAGTAC	AGAGGACCCAGAC	CACTGTGC	664
Qy	705	AGTTTGGCC	TGATGGCCAT	TGTGTGAC	AGCTTACATAC	CCCTGCTTCCCC	764
Db	665	AGCTTGGCT	TGACCGCCGGGTGT	GAAGCTATCGCTT	CAACAGCCCGCTTCCCT	724	
Qy	765	AAACGTCCCT	TACCCGGCGCAT	TGCGCGTGCAG	TGGGTCTGTGGGGGGAG	CCGACCTCT	824
Db	725	GACAGCCCT	TACCCCGCTAT	GTCCGCTCA	TGGGCGGAG	CCCGCATTA	784
Qy	825	GTGTGAGCT	CACTTCCGAG	CTTGTATGTGCT	CCCTGTATAGCAT	GGCAGTGAC	884
Db	785	GTGTGAGCT	CACTTCCGAG	CTTGTATGTGCT	CCCTGTATAGCAT	GGCAGTGAC	844
Qy	885	CTGTGACCG	TGTATATATAG	CTTGAGCCCA	TGGAACCCCA	AGCTGTGTGGGCTGTGT	944
Db	845	CTGTGTACG	GTGTATACCA	CACTTGAGCCCA	TGGAACCCCA	AGCTGTGTGGGCTGTGT	904
Qy	945	GGACCTTCT	CAACCTCTTACA	CAACCTGACTTTC	CTCTCCGCAAA	CGTCTTCTTGTTC	1004
Db	905	GGACCTTAC	CTCTCTCTTCA	CACTGTGACTTCA	CTCTCCGCAAA	CGTCTTCTTGTTC	964
Qy	1005	AGCCTGTAT	ACCAATCTGAC	CCGGGAGAT	TCTTGAGG	CCACTTCTTCCAGCTG	1064
Db	965	ACACTGTAT	ACCAACTGAG	CGGGGAGAT	TCTTGAGG	CCACTTCTTCCAGCTG	1024
Qy	1065	CCCAAGAT	ATGAGAGCTGTGG	CGGCTTTTGA	GTGACCCCA	GGGACATTTAGCAGCC	1124
Db	1025	CTTAAATAT	ATGAGAGCTGTGG	CGGCTTTTGA	GTGACCCCA	GGGACATTTAGCAGCC	1084
Qy	1125	TACTATCC	AGGCACTTAC	CCGGCCCAAT	TCAACTGCATATG	AGAAATCAAGTGGCCAC	1184
Db	1085	TACTATCC	AGGCACTTAC	CCGGCCCAAT	TCAGCTGTCAAT	GTAAATTTGAAGTGGCCAC	1144
Qy	1185	AAACGGAA	AGTGAAGTGC	CGCTTCAAACT	CTTATCTGTGTGA	CCCCAAGTATCAAGTG	1244
Db	1145	AAACGAGCA	TGTGAAGTGA	CGCTTCAAACT	CTTATCTGTGTGA	CCCCAAGTATCAAGTG	1204
Qy	1245	GGCTTC	TGSCACCAAG	ACTATGTGA	ATCAACGGGAGAA	GTACTGTGGTAGAGTTC	1304
Db	1205	GGCACT	TGSCCCCAAG	ACTATGTGA	ATCAATGGGAGAA	ATCTGTGGAGAGAGTTC	1264
Qy	1305	CAGTTTGT	GTAGAGCA	CAGCAAGCA	ATTCAGTCCATTC	CAATTTGATCACTGC	1364
Db	1265	CAGTTTGT	GTGTCA	CCAGCAAGCA	ATTCAGTCCATTC	CAATTTGATCACTGC	1324
Qy	1365	TACAGGAC	ACCGGAGTCT	TAGCTAGTAC	CTCTCTTACGAT	CTCCAAAGCAACCGCTGGCA	1424
Db	1325	TACACCGA	CA	CCGGCTTCTTAGT	GTAAATCTCTCTTACGAT	CTCCAAAGCAACCGCTGG	1384
Qy	1425	GGGATTT	TCATATG	TGCAAGACT	TGACGCTGTAT	CCGAAAGAACTGCGCTGCAAGCTGTG	1484
Db	1385	GGGATTT	TCATAGT	TCCGACCGGAGCG	GTGTATCCGGAAGAGCTG	CGCTGTGTATGCTGTG	1444
Qy	1485	GCAGACT	CGCCGATTA	TATGATGA	GGGTATCTGCGAT	ATGCAATGCAACCCCAAGTTC	1544
Db	1445	GCCGAT	CGACCCGAC	AGATGAGCTCA	ACTGTGCAGT	TGTGCAAGCGCGGCTCACAGTTC	1504

QY	1545	ACGTGCAAAAACCAATTCTGCAGAACCCCTCTTCTTGGGTCTGTGACAGTGTCAACAGACTGT	160
Db	1505	ACGTGCAAGAACCAAGTTCTTGCAGAACCCCTCTTCTTGGGTCTGTGACAGTGTGAACGACTGC	150
QY	1605	GGGGACGGAAGTGCACGAGAGAGGGCTGCAGAGCTCTGTGTGGGAATTTCAGTGTTCAGT	160
Db	1565	GGAGACACAGACGCACGACGAGGGGTGCAGTGTGTCCGGCCAGACCTTCAGGTGTTCAGT	160
QY	1665	GGGAAGTGTCTTCCTCTCAGAGCCAGAAAGTGTATATGGGAAGCACTGTGGAGATGGGTCT	170
Db	1625	GGGAAGTGTCTCTCGAAAAGCCAGACAGTGCAATGGGAAGACGACTGTGGGAGCGGATTC	160
QY	1725	GACGAGGCTTATATGTGCACAGCGTGAATGTGCTCTCTTGACCAAAATATACCTACCGTGC	170
Db	1685	GACGAGGCTCTCTCCCAAGGTGAACGTGTGCACTTGTACAAACACACTTACCGTGC	170
QY	1785	CAAAATAGCCCTCTGTGAGCAAGGGCAACCCGTGAAGTGTATGGGAAGACGACTGTAGC	180
Db	1745	CTCAATATGGCTCTGTCTTGAGCAAGGGCAACCTGTGAGTGAACGGGAAGGAGACTGAGC	180
QY	1845	GATGGCTCCGATGAGAAAACCTGTGACTGTGGCTGGATGCTTTACCAACAGGCTGCG	190
Db	1805	GAGCGCTCAATGATGAAGAGACTGCGACTGTGGCTGGATTCACGACAGAGCTGT	180
QY	1905	GTTGGTGTGTGACGAAATGCGGACAGAGGCGAGTGGCCCTGCGAGGTGAGGCTCCAGCC	190
Db	1865	GTGTGTGGGGGACGAGATGCGGATGAGGGCGAGTGGCCCTGCGAGGTGAAGCTGCATGCT	192
QY	1965	CTGGGCAAGGGGCACTTGTGTGGGGGCTGTGCTATCTCTCTGACTGTGGCTGTCTGCA	202
Db	1925	CTGGGCAAGGGGCACTGTGGGTTGCTTCTCTATCTCTCCAACTGGGCTGTCTGTGC	198
QY	2025	GCTCATTTGCTTTGAGATGACAAAATTTTCAAGTACTCAGACTACACGATGTGTGAGGGCC	208
Db	1985	GCACACTGTGCTACATCATGATGACAGAGGATTCAGTACTCAGACCCACGACGTGTGAGGCC	204
QY	2085	TTTCTGGGTGTGTGGAACAGAGCAAGCCGCAAGTGCCTGTGGGTGACAGAGCTGAAGCTC	214
Db	2045	TTTCTGGGTGTGTGACACAGCAGACCGCAGCGCCCTGTGGGTGACAGAGCGAGGCTC	210
QY	2145	AAACGTATCATCAACCAACCCCTTCTCATATGATTTTCACTTGTGACTATACATCGCTTGG	220
Db	2105	AAAGCATATATCTCCACCCCTTCTTCAATGACTTCACTTGCATATACATCGGCTGG	216
QY	2205	CTGGAGCTGAGAAAGTCGTGTGAGTACAGCACCTGTGTCGGCCCATCTGCGCTGAT	226
Db	2165	CTGAGACTGAGAAACCGGCAAGTACAGCTTCATATGTGTGGCCCATCTGCTTGCCTGAGC	222
QY	2265	GCTACCCATGTCTTCCCTGTCTGCGCAAGGCCATCTGAGTACAGGCTGTGGGGACACAAA	232
Db	2225	GCTCTCCAGTCTTCCCTGTCTGCGCAAGGCCATCTGAGTACAGGCTGTGGGGACACACCAAG	228
QY	2325	GAGGGAGGTACCGAGCGCTATCTGTGAGAAAGGTGAGATTCGGTGTCAATCAACAGACC	238
Db	2285	TATGAGAGCATCTGGCGGCTGATCTCTGCAAAAAGGTGAGATTCGGGTATCAACAGACC	234
QY	2385	ACCTGTGAGACCTTCATGTCGCGAGCAGATTCACCCACAAATGATGTGTGGGTTTCCTC	244
Db	2345	ACCTGCGAAGACCTCTGTCGCGAGCAGATTCACGCGCGCATGATGTGTGGGTTCTCTC	240
QY	2445	AGTGGGGGTGTGACTCTGTCCAGGGGTACTCTGTGTGGCCCTTGTCAAGCGCGAGAAA	250
Db	2405	AGCGGCGCGGTGACTCTGTCCAGGGGTATTCGCGGGGACCCCTGTCCAGGTGGAGCG	246
QY	2505	GATGGGCAAAATGTTCAAGGCTGTGTGTGTGTGAGCTGGGGTGAAGGCTGTGCTCAAGGAC	256
Db	2465	GATGGGCGGATCTTCCAGGCGCGGTGTGTGTGTGAGCTGGGGAGCGGCTGTGCTCAAGGAC	252
QY	2565	AAAGCAGGCGTGTACACAAAGGCTCCCTGTATTTGGGACTGTGATCAAAAGACACACTGGG	262
Db	2525	AAAGCAGGCGTGTACACAAAGGCTCCCTGTGTGGGACTGTGATCAAAAGGACACTGGG	258
QY	2625	GTATATGACGATGACAGACGCGGACCAACCAACCCACAGGAGTCCCGACATGACAC	268

465 GGTCCCTTACCAAGAAAGTGGCTGTAACTGCTTCACTGAGGGCAAGTGTATGCGCTTAC 524
425 GGGCCCTTACCAAGAAAGTGGCTGTGAAGGCTTTCAGGAGGAGGAGGCTTATCCCTTAC 484
525 TACTGTGAGAGTGTAGAGATCCCCCAACCTGGGAGAAAGATTGATGCGCCATGCT 584
485 TACTGTGAGAGTGTAGAGATCCCCCAACCTGGGAGAAAGATTGATGCGCCATGCT 544
585 GTGAGAGAGTGTAACTTGTCCACCCGAGACAGGAGCACTGAAATCTTCTGTGCTAA 644
545 GAGGAGCGGTGTAGTGTGCTGCCCCGCGCGCTCTCCCTGAAAGTCTTGTGTGCTAC 604
645 TCTGTGTGTGCTTCCCCCATTTGACCCCAAGATGTGAGAGAGCTCAGAGCAACAGCTGC 704
605 TCAGTGTGTGCTTCCCCCAAGAGCTCAAAACAGTACAGAGAGCCAGAGCAACAGCTGC 664
705 AGTTTGGCCCTGATCCCATGAGTGCAGAGTGCAGAGCTTCACTTACCCCTGTGCTTCCC 764
665 AGCTTGTGCTGACGCGCGCGGTGTGAGTGTGATGCGCTTCAACAGCGCGGCTTCCCT 724
765 AACAGTCCCTTACCGGAGATGCGCGCTGCACTGAGTGTCTTGTGCGGGGAGCGCGACTCT 824
725 GACAGCGCTTACCGCGCTCATGCGCTGCACTGAGTGTGCGCGGGAGCGCGACTCA 784
825 GTGTGTGAGCTTCACTTCCGAGAGCTTGTGATGCTCTCTGTGATGAGCATGAGCACTGAC 884
785 GTGTGTGAGCTTCACTTCCGAGAGCTTGTGATGCTCTCTGTGATGAGCATGAGCACTGAC 844
885 CTGATCACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 944
845 CTGTGTGAGCTTCACTTCCGAGAGCTTGTGATGCTCTCTGTGATGAGCATGAGCACTGAC 904
945 GAGACCTTTCACCTCTTCAAACTGATCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1004
905 GGCACCTTACCT 964
1005 AGCTGTATCACTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1064
965 AACCTGTATCACTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1024
1065 CCCAAGATGAGAGCTGTGCGGCTTTTGTGATGAGACCCCAAGGAGCATTTTATGAGCTTCC 1124
1025 CTTAGATGAGAGCTGTGAGAGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1084
1125 TACTATCAAGGCACTACCGGCGCAATCACTGATGATGATGATGATGATGATGATGATGATGAT 1184
1085 TACTATCAAGGCACTACCGGCGCAATCACTGATGATGATGATGATGATGATGATGATGATGAT 1144
1185 AACCGGAACGTGAGAGCTGTGCGGCTTTTGTGATGAGACCCCAAGGAGCATTTTATGAGCTTCC 1244
1145 AACCGGAACGTGAGAGCTGTGCGGCTTTTGTGATGAGACCCCAAGGAGCATTTTATGAGCTTCC 1204
1245 GGCCTCTGCAACCAAGAGCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1304
1205 GGCACCTGCGGCAAGAGCTATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1264
1305 CAGTTTGTGTGAGAGCAACAGCAAGCAATGATGATGATGATGATGATGATGATGATGATGATGAT 1364
1265 CAGTTTGTGTGAGAGCAACAGCAAGCAATGATGATGATGATGATGATGATGATGATGATGATGAT 1324
1365 TACAGCGACACCGGCTTCTAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1424
1325 TACAGCGACACCGGCTTCTAGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1384
1425 GGGATGTTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1484
1385 GGGAGTTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1444
1485 GCGAGCTGCGGAGTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1544
1445 GCGAGCTGCGGAGTTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1504
1545 ACGTGAACCAAGTTTGAAGCGGCTTCTGTGAGTGTGATGATGATGATGATGATGATGATGATGAT 1604

1505 ACGTGAACCAAGTTTGAAGCGGCTTCTGTGAGTGTGATGATGATGATGATGATGATGATGATGAT 1564
1605 GGGAGCGAATGAGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1664
1565 GAGAGCAACAGAGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1624
1665 GGGAGCGAATGAGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1724
1625 GGGAGCGAATGAGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1684
1725 GAGAGCGCTTCACTGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1784
1685 GAGAGCGCTTCACTGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1744
1785 CAATAATGCTCTGCTGCTGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1844
1745 CTCAATGCTCTGCTGCTGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1804
1845 GATGCTCTGATGAGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1904
1805 GATGCTCTGATGAGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1864
1905 GTGTGTGTGTGAGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1964
1865 GTGTGTGTGTGAGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1924
1965 CTGGGCAAGGCACTTGTGTGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 2024
1925 CTGGGCAAGGCACTTGTGTGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 1984
2025 GCTCATGCTTTCAGATGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 2084
1985 GCACTGCTTTCAGATGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 2044
2085 TTCTGTGTGTGTGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 2144
2045 TTCTGTGTGTGTGAGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 2104
2145 AAAGTATCATCAACCAAGGCTTCTCTCAATGATTTTCACTTGAATGATGATGATGATGATGATGAT 2204
2105 AAAGTATCATCAACCAAGGCTTCTCTCAATGATTTTCACTTGAATGATGATGATGATGATGATGAT 2164
2205 CTGAGCTGAGAGAGGCTGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 2264
2165 CTGAGCTGAGAGAGGCTGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 2224
2265 GCTACCAATGCTTCTCTGCTGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 2324
2225 GCTACCAATGCTTCTCTGCTGAGAGGCTGAGCTGCTCTGCTGAGAGTTTCAAGTTTCAAT 2284
2325 GAGGAGGATCAAGAGGCTGATCTGCTGAGAGGCTGATCTGCTGATCAACCAAGC 2384
2285 TATGAGGCACTGAGAGGCTGATCTGCTGAGAGGCTGATCTGCTGATCAACCAAGC 2344
2385 ACTGTGAGAGCTGATGAGAGGCTGATCTGCTGAGAGGCTGATCTGCTGATCAACCAAGC 2444
2345 ACTGTGAGAGCTGATGAGAGGCTGATCTGCTGAGAGGCTGATCTGCTGATCAACCAAGC 2404
2445 AGTGGGAGTGTGAGCTGCTGAGAGGCTGATCTGCTGAGAGGCTGATCTGCTGATCAACCAAGC 2504
2405 AGTGGGAGTGTGAGCTGCTGAGAGGCTGATCTGCTGAGAGGCTGATCTGCTGATCAACCAAGC 2464
2505 GATGGGCAATGTTTCAAGGCTGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2564
2465 GATGGGCAATGTTTCAAGGCTGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 2524
2565 AAGCGAGGCTGTATCAAGAGGCTTCTGTGTGATGATGATGATGATGATGATGATGATGATGATGAT 2624
2525 AAGCGAGGCTGTATCAAGAGGCTTCTGTGTGATGATGATGATGATGATGATGATGATGATGATGAT 2584
2625 GTATGAGCAATGAGAGAGGCTTCTGTGTGATGATGATGATGATGATGATGATGATGATGATGATGAT 2684

Db 2585 GTATAGGGGCGGG---GCCACCAATGTTACACCTCGGGGSCACCATGCTCCACC 2641

QY 2685 CTTGGATACAGAGAGAGAACTGACACATTTATGCTGTGGCCTCCCGCCCAACACA 2744

Db 2642 CCAAGTGGACAG--CCTTCAGAGCTGGAGACTGACCGCTGACTGACCAAGGCCC-CCAGA 2699

QY 2745 ACCGAGCTGGAACCTGATCCTTAGAGACTCAGAGT 2780

Db 2700 ACATACACTGTGAAGTCAATCTCCAGGGCTCCAAAT 2735

RESULT 15

US-10-112-221A-1

Sequence 1, Application US/10112221A

Publication No. US20030166851A1

GENERAL INFORMATION:

APPLICANT: Ong, Edwin

APPLICANT: Madison, Edwin

TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING A TRANSMEMBRANE SERINE PROTEASE

FILE REFERENCE: 24745-1615

CURRENT APPLICATION NUMBER: US/10/112,221A

CURRENT FILING DATE: 2002-03-27

PRIOR APPLICATION NUMBER: 60/279,228

PRIOR FILING DATE: 2001-03-27

PRIOR APPLICATION NUMBER: 60/291,501

PRIOR FILING DATE: 2001-05-15

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 1

LENGTH: 3147

TYPE: DNA

ORGANISM: Homo Sapien

FEATURE:

NAME/KEY: CDS

LOCATION: (23) ... (2589)

OTHER INFORMATION: Nucleotide sequence encoding MTSpl

PUBLICATION INFORMATION:

AUTHORS: O'Brien, T.J. and Tanimoto, H.

DATABASE ACCESSION NUMBER: GenBank #AR081724

DATABASE ENTRY DATE: 2000-08-31

PATENT DOCUMENT NUMBER: 5,972,616

PATENT FILING DATE: 1998-02-20

PUBLICATION DATE: 1999-10-26

US-10-112-221A-1

Query Match 60.6%; Score 1883.2; DB 15; Length 3147;

Best Local Similarity 81.2%; Pred. No. 0;

Matches 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3;

QY 45 GATCGGACCGCCAAACCATGGTGTGCAATCGGGCCCGCAAGCGGGGCTCTCAG 104

Db 5 GAGCGGCTCGGGGTACCATGGGAGCGATCGGGCCCGCAAGGGGGCGGAG 64

QY 105 GACTTCGCGCGGAGCTCAAGTACAACTCCGCGACGAGAAAGTGAAGGCTTGAAGAA 164

Db 65 GACTTCGCGCGGAGCTCAAGTACAACTCCGCGACGAGAAAGTGAAGGCTTGAAGAA 124

QY 165 GGTGTGAGTTCCTGCTGCGAACAATGCCAAAGAAAGTGAAGAGCGAGCGCGC 224

Db 125 GCGCGGAGTTCCTGCGCAAGTCAACAGTCAAGAAAGTGAAGAGCGAGCGCGC 184

QY 225 TGGGTGTGCTGTGCGAGCGCTGTTCAGCTTCTCTCTCTCTCTCTCTCTCTCTCT 284

Db 185 TGGGTGTGCTGTGCGAGCGCTGTTCAGCTTCTCTCTCTCTCTCTCTCTCTCTCTCT 244

QY 285 CTGCTGTGCGACTTCCATTCATCGGAATGTGGGGTTCAAAAGTCTTAAAGGCGATCTG 344

Db 245 CTGCTGTGCGACTTTCGACTACCGGAGCGTGTGCGAAGGCTTCAATGCGCTACATG 304

QY 345 AGGATCACAAAATGAGATCTTCTGATGCGTATGAGAACTCCACTCCAGAGATTATC 404

Db 305 AGGATCACAAAATGAGATCTTCTGATGCGTATGAGAACTCCACTCCAGAGATTATC 364

QY 405 AGCTGGCCAGCCAGGTTGAGAGAGGCGCTGAGCTGTGTACAAATGAATGCTCTGTCTG 464

Db 365 AGCTGGCCAGCAAGTTGAGAGAGGCGCTGAGCTGTGTACAAATGAGCTCTGTCTG 424

QY 465 GGTTCCTTACCAAGAAAGTGTGCTGTAACTGCTTCAAGTGAAGGAGTGTATCGCTAC 524

Db 425 GGGCCCTTACCAAGAAAGTGTGCTGTAACTGCTTCAAGTGAAGGAGTGTATCGCTAC 484

QY 525 TACTGTGAGATTTACAGATTCCTCCCAACCTGCGAGAAAGTGTATGCGCGCATGCT 584

Db 485 TACTGTGAGATTTACAGATTCCTCCCAACCTGCGAGAAAGTGTATGCGCGCATGCT 544

QY 585 GTGAGAGAGTTGATTAATTGCAACCCCGAGAGCGGCACTGAATCTCTTGTCTTACA 644

Db 545 GAGAGAGAGTTGATTAATTGCAACCCCGAGAGCGGCACTGAATCTCTTGTCTTACA 604

QY 645 TCTGTGTGAGCTTCCCAATTGACCCCAAGATCTGACAGACTCAGAGCAACAGCTGC 704

Db 605 TCAGTGTGTGCTTTCCTCCAGGACTCCAAACAGTACAGAGCCAGAGCAACAGCTGC 664

QY 705 AGTTTGTGCTGTGATCCCATGCTGAGAGTGAACAGCTTCACTACCCCTGTCTCC 764

Db 665 AGCTTGTGCTGTGATCCCATGCTGAGAGTGAACAGCTTCACTACCCCTGTCTCC 724

QY 765 AACAGTCCCTACCGGCGCATGCGCGTGCAGAGTGGTCTGTGGGGGGAGAGCGCATCT 824

Db 725 GACAGCCCTTACCGGCGCATGCGCGTGCAGAGTGGTCTGTGGGGGGAGAGCGCATCT 784

QY 825 GTGCTGAGCTTCACTTCCGAAGCTTGTATGTGCTCCTGTGATGAGATGAGCACTGAC 884

Db 785 GTGCTGAGCTTCACTTCCGAAGCTTGTATGTGCTCCTGTGATGAGATGAGCACTGAC 844

QY 885 CTGTGACCGTGTATGATGCTGAGCCCATGGAACCCACGCTGTGTGCGCTGTGT 944

Db 845 CTGTGACCGTGTATGATGCTGAGCCCATGGAACCCACGCTGTGTGCGCTGTGT 904

QY 945 GGCACCTTCTACCCCTCCAGCAACCTGATCTCTCTCTCCCAAGCTCTTCTCTGTC 1004

Db 905 GGCACCTTCTACCCCTCCAGCAACCTGATCTCTCTCTCCCAAGCTCTTCTCTGTC 964

QY 1005 AGCTGTATTAACCAATAGTACCGGCGACATCTGTGAGGCACTTCTTCCAGCTG 1064

Db 965 AACTGTATTAACCAATAGTACCGGCGACATCTGTGAGGCACTTCTTCCAGCTG 1024

QY 1065 CCAAGATGAGAGTGTGTGCGGCTTTTGAATGACCCCAAGGACATTTAGAGCGCC 1124

Db 1025 CTAAGATGAGAGTGTGTGCGGCTTTTGAATGACCCCAAGGACATTTAGAGCGCC 1084

QY 1125 TACTATCCAGGCACTACCGGCGCAACATCAACTGCAATGGAATATCAAGTGTGCCAAC 1184

Db 1085 TACTATCCAGGCACTACCGGCGCAACATCAACTGCAATGGAATATCAAGTGTGCCAAC 1144

QY 1185 AACCGAACTGAAAGTGTGCTTCAACTTCTTATCTGTGAGCCCAAGTACAGATG 1244

Db 1145 AACCGAACTGAAAGTGTGCTTCAACTTCTTATCTGTGAGCCCGGCTGTCTGCG 1204

QY 1245 GGTCTTGCACCAAGATTAATGTGAGATCAACGAGGAAAGTACTGCGGTGAGAGTTC 1304

Db 1205 GGTCTTGCACCAAGATTAATGTGAGATCAACGAGGAAAGTACTGCGGTGAGAGTTC 1264

QY 1305 CAGTTTGTGAGAGCAAGCAAGCAAGATTCAGTCCACTTCCATTCGATTCATCTG 1364

Db 1265 CAGTTTGTGAGAGCAAGCAAGCAAGATTCAGTCCACTTCCATTCGATTCATCTG 1324

QY 1365 TACACGAGACACCGGCTTCTAGTGAATCTCTTCAAGCTCCAGAGCCCGTGC 1424

Db 1325 TACACGAGACACCGGCTTCTAGTGAATCTCTTCAAGCTCCAGAGCCCGTGC 1384

QY 1425 GGGATTTCAATGTCCAAAGACTGAGCGGTGATCCGAAAGAACTGCGGTGAGCGCTG 1484

Db 1385 GGGATTTCAATGTCCAAAGACTGAGCGGTGATCCGAAAGAACTGCGGTGAGCGCTG 1444

